

SOAP

with which is included an

Insecticide & Disinfectant Section

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New

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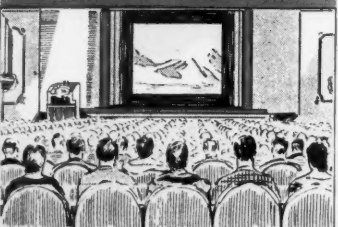
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SOAP

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with which are included

Insecticide & Disinfectant Section

Oil & Fat Section

Volume VIII

March, 1932

Number 3

TABLE OF CONTENTS

EDITORIALS—

The Apple Cart	19
A Revolution in Detergents?	19
Take Your Choice	20
Russia and Soap	20
The New Insecticide Standard	93
Pyrethrum and the "War"	93

FEATURE ARTICLES—

Laundry Soap	21
Coconut Oil and The Philippine Situation — By J. D. Craig	25
The Essential Oils of Reunion	29
Soap and the Negro Buyer	31
New Products	35
Castor Oil as a Source of Perfumes — By M. G. Shepard and P. J. Leaper	71
The Rat Flea as a Disease Carrier — By Dr. C. L. Williams	99

DEPARTMENTS—

Personal and Impersonal	43
Products and Processes	45
Record of Trade Marks	47
New Patents	49
Contracts Awarded	51
Market Reports	53 to 63
Current Raw Material Prices	65

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INSECTICIDE and Disinfectant Section, which is included as a department of every issue of SOAP, begins on page 79. Oil and Fat Section begins on page 71. These sections contain news, articles and editorial opinion of particular interest to their respective industries.

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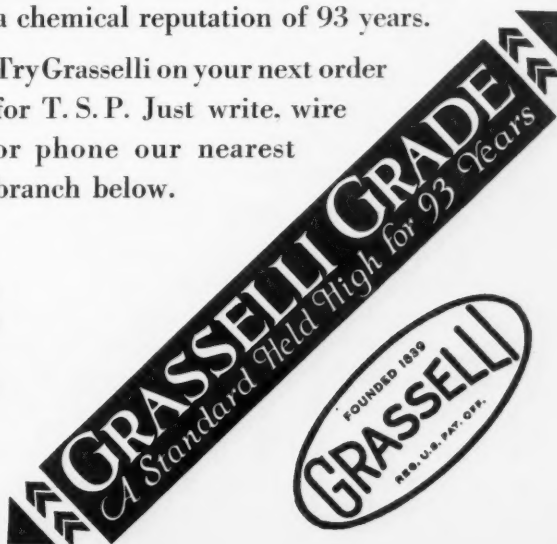
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First
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MAY
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VOL. I. No. 1

MAY, 1932

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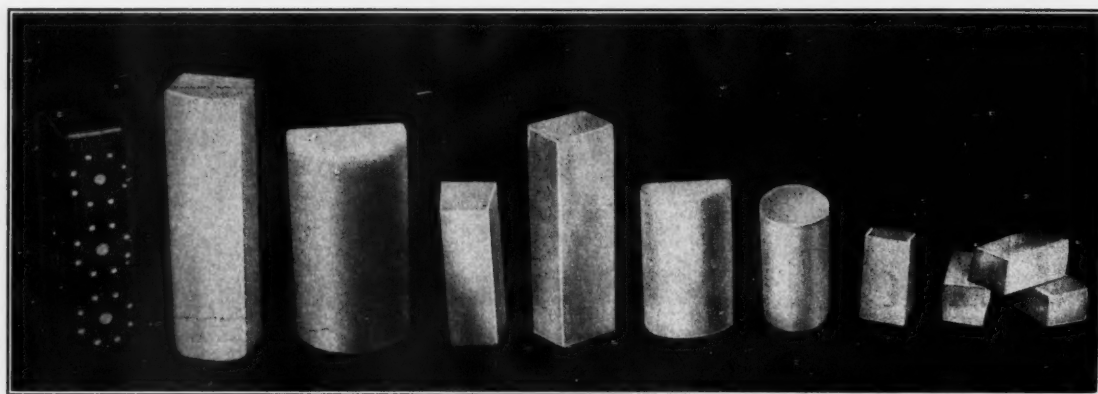
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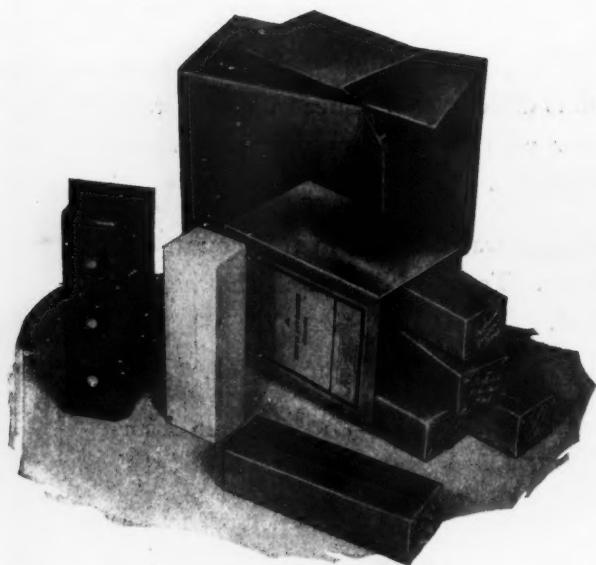


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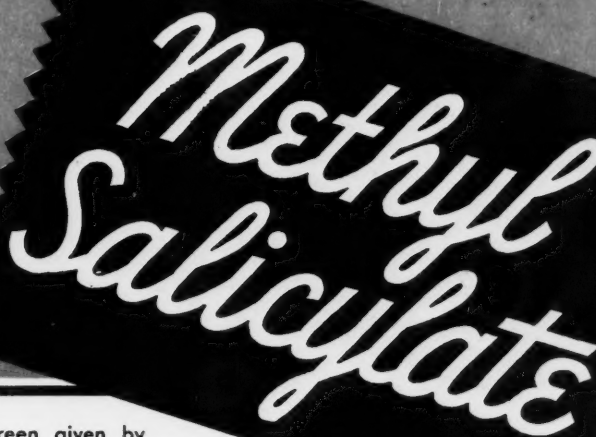
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Anthranilate



OUR large, modern manufacturing facilities as the leading American source of supply for Methyl Anthranilate are devoted to constantly improving the quality of this product to insure greater effectiveness in your products. The true, unadulterated, grape-like odor of Dow Methyl Anthranilate holds its strength to add greater salability to your products. You will find it unmatched in purity, uniformity and in the results it gives. Why not try it on your next order?



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polishes

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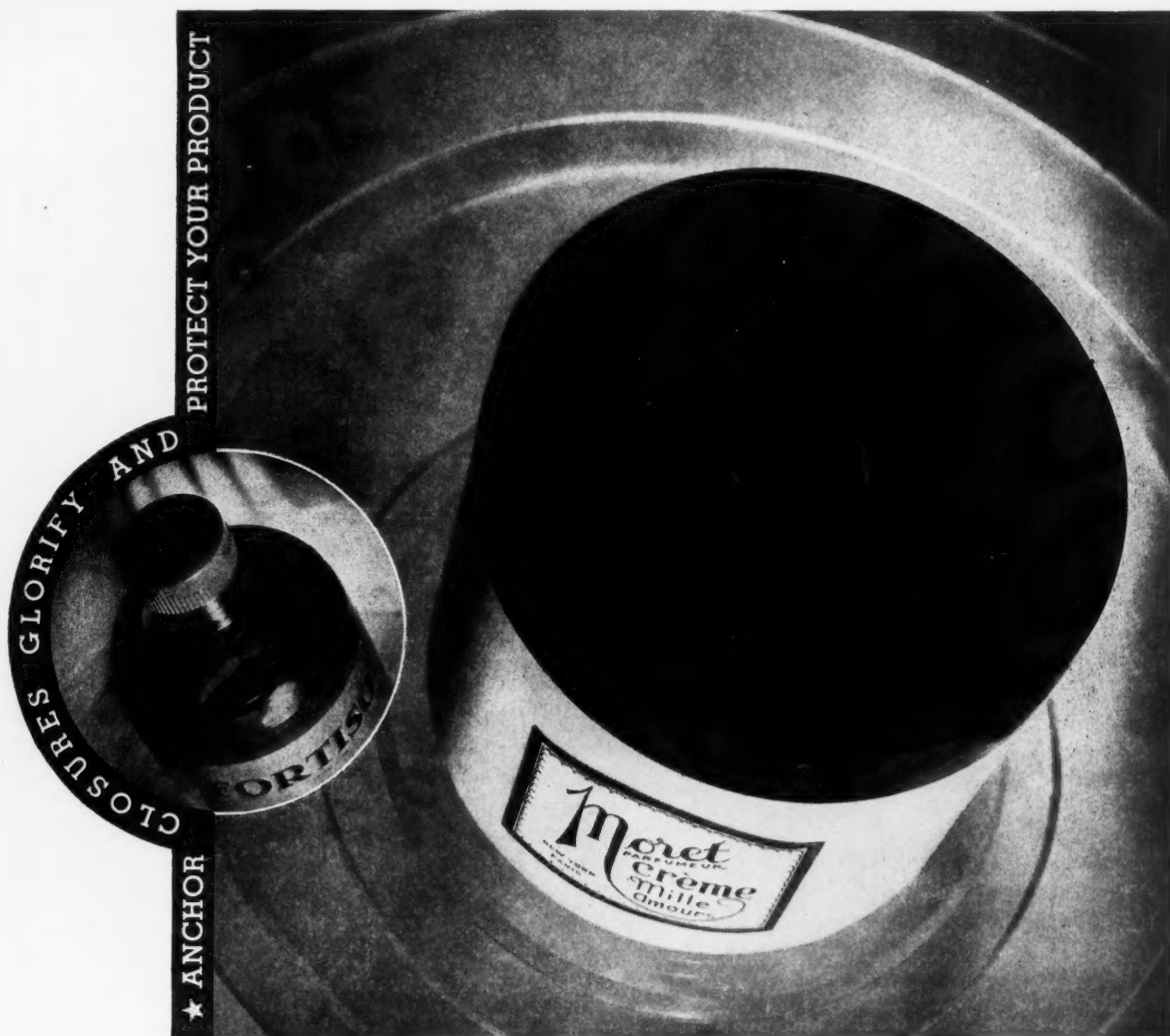
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230 Park Avenue **New York**

Manufacturers of



Activated Carbon

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● **LOOK INSIDE THE CAP...
FOR HIDDEN VIRTUES**

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It's when you look inside an Anchor Molded Cap that really startling differences appear. Beneath its gleaming, lustrous surface there are mechanical features of design and construction that make it a finer and a more satisfactory closure.

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1. Holds liner secure in cap during entire life of package—regardless of the nature of the contents or the number of applications and removals.
2. Permits delivery of caps to you completely assembled—ready to use.
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4. Permits mechanical application of caps from automatic cap hoppers.
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6. Prevents liners from buckling, wrinkling and creeping.
7. Prevents leakage and breakage of caps due to buckled liners.
8. Permits free rotation of liners, thereby preventing injury to them from imperfections in the glass sealing surface.
9. Holding liners flat in cap insures uniformly tight seal and protection against evaporation, leakage, escape of aroma or volatile elements.

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Anchor Cap & Closure Corporation
Long Island City, N. Y. Toronto, Canada
Branches in all Principal Cities

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DRIES TO A LUSTRE

LIQUID WAX

Does Not Require Polishing

"BEAMAX" cuts floor maintenance costs by saving labor—no buffing is necessary on application, and no polishing is required.

"BEAMAX" is easily applied with a cotton mop or lamb's wool applicator. It smooths itself. It dries to a hard, lustrous finish in twenty minutes or less.

"BEAMAX" is long wearing. Finish is easily maintained by buffing; each cleaning increases the lustre. Floors can be washed with clear water without affecting the finish.

"BEAMAX" is recommended for all types of floors—this one wax takes care of linoleum, wood, tile, terrazzo, rubber, asphalt tile, mastic, etc.

"BEAMAX" will not show lap marks when used for "patching" worn spots. It has no odor.

"BEAMAX" is sold in drums, half-drums, and quarter-drums, as well as in 10-gal., 5-gal., and 1-gal. cans. It is a perfect emulsion and will not settle out.

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THE DAVIES-YOUNG SOAP COMPANY

Dayton, Ohio

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Dayton, Ohio

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Name

Address

City

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● "PARA" PROFITS?

There's a ready market for PARADICHLOROBENZENE crystals made by du Pont. They kill moths, peach borers and offensive odors.

HERE'S a moth destroyer that will not injure fabrics, is easy to use, has a pleasant, antiseptic odor that doesn't linger in fabrics after they are exposed to air—du Pont Para-Dichlorobenzene. "Para" crystals are also an effective control against the peach and apple tree borer, and a deodorizer that will neutralize offensive odors in lavatories, garbage cans and stench traps. Du Pont Para-Dichlorobenzene is safe and efficient. Available in three sizes of uniform crystals, it is easy and economical to prepare for sale.

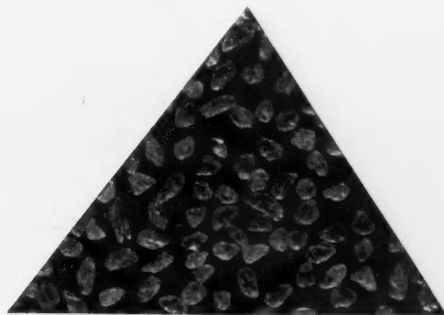
Du Pont Para-Dichlorobenzene can be used in shaker top cans, moulded into blocks or balls, and colored or perfumed to enhance its sales appeal. It is highly effective against certain orchard insects. Its efficacy has been proved.



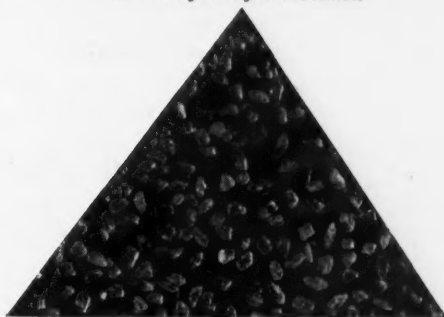
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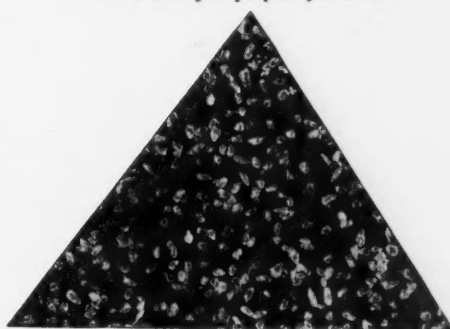
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*Du Pont "Para"—large size crystals.
For shaker top cans. Du Pont standards
assure uniformity at all times.*



*Du Pont "Para"—medium size crystals.
For making cakes or blocks. Three sizes
make it easy to prepare for sale.*



*Du Pont "Para"—small size crystals.
For agricultural purposes. This size
can be moulded too if desired.*

Organic Chemicals Dept.
E. I. du Pont de Nemours & Co., Inc.
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Please send me further information, samples
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Soaps and Perfumes

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THE UNGERER standard of quality for basic materials has long been recognized by the American perfume and soap manufacturer. We solicit your inquiries for testing samples and current quotations.



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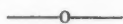
SOAP

VOLUME EIGHT

NUMBER THREE

The Apple Cart

THE soap trade merchandising apple cart seems to have been quite definitely upset during recent months. The laundry soap marketing situation has apparently been the most disturbing factor, although toilet soap "specials" have played a part. Smaller soap makers have had their measure of revenge against the big brands, and the large manufacturers have retaliated in kind. Competition has gone on a spree. Merchandising policies of years' standing have been junked. That the industry as a whole is going to pay the price, there is no doubt. The sooner the apple cart is replaced in an upright position, the lower will be the price which it pays.



A Revolution in Detergents?

THE statement has been made that a basic improvement in soap manufacture has not been made in a hundred years. This probably is true in a general sense if we consider soap manufacture strictly as the saponification of a glyceride or fatty acid with an alkali. To look beyond this point, and view the host of new sulfonated products, hydrogenated phenols, amine derivatives, and others which have been patented all over the world, is to get a slightly different picture. It seems as

though this picture might portray a potential, or even an impending revolution in detergent manufacture. Claims for the newer products seem to indicate that they have all the advantages of ordinary soaps with none of the disadvantages. This seems to be the case, not only for the newer products as they are announced or patented, but for the ones which have been known for a number of years.

Why then, have they not come to be used more widely to replace soap, especially in textile, laundry and other commercial detergent operations for which they are fitted? The commercial consumption of ordinary soap continues large. The soap industry still supplies textile mills, laundries, and others with tonnage needs, and some mills manufacture considerable for their own use. Why? Apparently, the answer is one of price and economy. Soap is cheap. Whether used in hard water, soft water, or any other kind of water, for a detergent operation, it is evidently the lowest cost product, with varying modifications, to do the job satisfactorily.

Millions of pounds of cheap fat and oil go into soap manufacture every year. There is very little of this tremendous tonnage of fat which could be used anywhere else. It must find its way to market and soap is the market. If it cannot find buyers at six or seven cents, it must find them at two or

three, as events of the past two years have proved. The sheer pressure of this great raw material supply seems to be the most likely assurance that soap, — ordinarily saponified fat, modified as occasion may require with phosphate, silicate, soda ash, or rosin,—is going to be the world's chief detergent for some years to come. New things have been hailed before as the first step toward revolution in an industry. They have been of unquestioned merit,—but the revolution has never come. This only goes to emphasize that scientific developments, no matter how far-reaching they may appear, must also pass successfully a close economic scrutiny before they can attain commercial importance.

Take Your Choice

THEY tell us that owing to present conditions, people are not sending their clothes to the laundry to be washed, and as a consequence, the laundry business is in bad shape. As a result of this, the laundries are not buying soap and sales of tallow chip have dropped very materially. People are washing their clothes at home. This accounts for an increased sale of bar laundry soaps and packaged powders. At the same time, because there are so many people out of work, there are very few clothes to wash, especially overalls and general work clothes which use the most soap in their washing. Therefore, we are told, although people are doing their washing at home, they are not doing as much of it as heretofore because there are not as many clothes to wash. Hence, less laundry soaps are being used in the home. However, such soaps as are used at home, are not being used economically, but are being wasted to a great extent by hard water and inefficient home washing methods. This means that more soap is being used for those washing jobs which are being done.

These and a dozen other explanations have been put forward to explain that more soap or less soap, as the case may be, is being used. Take your pick of reasons and either side of the controversy you may choose. Each manufacturer will tell you that he has not lost business because of reasons "a, b, or c," but that all his com-

petitors have lost because of reasons "d, e, or f." It is possible to explain at the same time, and in the same breath, that soap consumption has both increased and decreased, with a reason to back up every argument.

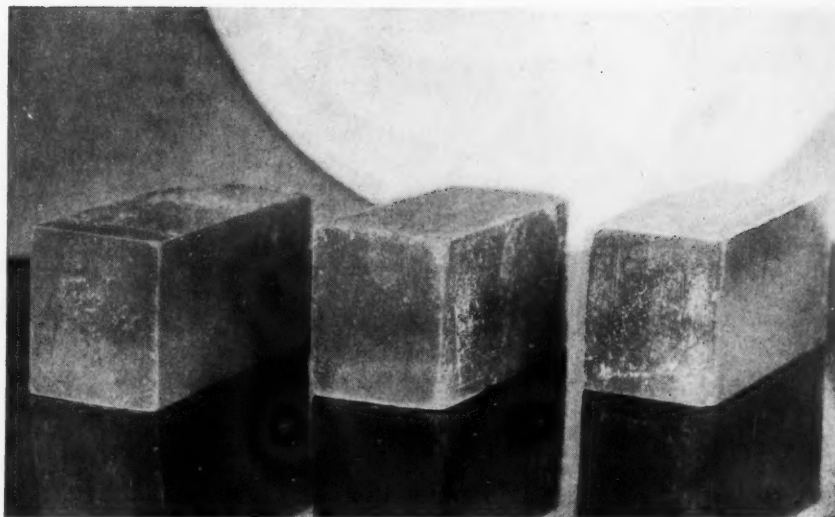
Russia and Soap

IF the Soviet is doing nothing else for Russia, it is apparently teaching an increasing number of its people the benefits of the regular use of soap and water. According to news stories, there is and has been a shortage of soap in Russia. This shortage has been due, not to any shrinkage of production, but to a rapidly expanding demand from the general mass of Russians who have not been very large users of soap heretofore. Production has not been able to keep up with demand. Hence, apparently, have come the stories of high prices and difficulties in securing soap in Russia.

These reports of growing soap consumption from the Soviet are heartening in a sense. When a fellow starts to keep his neck clean and also washes behind his ears, it is a hopeful sign. The dawn of a clean neck has marked the turning point in the career of many an American boy, and it may have the same significance in the history of the Russian people. At the same time, we look back at the soap exports from Russia to England which caused such a furore in the English soap trade eight or nine months ago, and wonder why a country which cannot supply its own people with sufficient soap to meet their needs, should export even a small tonnage.

We wonder what these manufacturers who sell fifteen per cent liquid soap for less than twenty cents per gallon use in their soap besides water. Judging from some of the soaps we have run across in lavatories, they cannot use a great deal of anything else. Even the water does not seem to be of a particularly good quality. We think that these manufacturers, who seem to be striving to wreck the liquid soap business, should be assured that they are certainly on the right track if that is their aim.

Bargain day in the chain store, —three sixteen ounce cakes of yellow laundry soap for ten cents. This means the manufacturer gets about two cents per pound delivered for his soap. Some chains are now selling 14 ounce bars at five cents each.



LAUNDRY SOAP

A Discussion of Present Low Prices, Competition, and Future Possibilities

THE giant unwrapped bar of yellow laundry soap, sold at heretofore unheard of low prices, was one of the more or less disturbing developments of the American soap industry during the past year. The large bar itself was not new, but the manner in which it has been pushed for sale during the past year is very decidedly a new development. The large soap manufacturer entered the field which had previously been almost exclusively that of the smaller local manufacturer, and the general competitive "cat and dog fight" which ensued, has done many things to the laundry bar soap market and is likely to do more before the last is heard of this general stampede for the low-priced business. Manufacturers have turned to their "fighting" brands as an answer to present competitive conditions, but they may find that they are fighting chiefly against their own nationally advertised brands.

Observers of the soap industry were somewhat surprised in the early weeks of 1932 to note

the rather substantial reduction in earnings of several companies for the 1931 twelve-month period. Soap raw material prices had been at the lowest levels in recent years all through 1931, and it seemed that earnings should have been even better than in 1930. The story of the drop in soap manufacturers' earnings in spite of lower raw material costs is not a very complicated one. Reduced profit can be traced directly back to lower soap prices. A review of the situation leading to the cut in profits is just another demonstration that lower material costs are not always an unmixed blessing to manufacturers.

Developments in the laundry soap market indicate one of the steps by which soap makers have arrived at the destination of lower profits in 1931. One of the large producers, loaded up with low cost raw materials, and anxious to keep its men working on a full-time basis, entered into an agreement with a nationally prominent chain store organization by which the manufacturer was to supply a low-priced giant bar of laundry soap at a figure very near the actual cost of production. This plan, adopted to "keep the wheels turning," worked out about the way such plans usually do. Other manufacturers refused to be outmaneuvered in the fight for business and felt called upon to meet this challenge with even big-



Nationally advertised brands of laundry soap are the ones which are most likely to be injured permanently by competition from the flood of low-priced yellow bars which have come on the market.

ger cakes and lower prices. The result has been that the chain store market was literally flooded with heavy stocks of low-priced yellow unwrapped bar soap.

At some quotations which are still current, it seems probable that manufacturers must be selling even below actual cost of production. In "special sales" nation-wide chains offered three sixteen-ounce bars of fairly good laundry soap for ten cents. To sell at such a price, retailers can only pay soap makers considerably less than \$2.00 a case, which is about the lowest level at which this quality soap can be sold at a profit. The raw materials themselves, house grease, rosin and alkali, although available now in large quantities at record low figures, still cost at least in the neighborhood of one and one-half cents a pound. A selling price of two cents a pound does not leave sufficient margin to allow for manufacturing expense, overhead, delivery charges, etc., to say nothing of even a fractional margin of profit.

A rather hopeful sign appeared late last month. A representative of *Soap*, checking the market in the chain stores, found that in a number of the stores in and near New York of one of the large five-and-ten chains, the giant sixteen ounce bar at three for ten cents was no longer carried. Previously, it had received rather prominent display on the soap section tables. Whether it was the chain which decided to carry the soap no longer because it interfered with the sale of regular brands or whether the soapmaker decided not to supply it further, could not be found out. An inquiry at an office of the manufacturer elicited no information.

SALES of this sixteen ounce cake have been particularly heavy in Southern markets, the explanation for this being the sharply reduced

purchasing power of the residents of this section and their anxiety to economize in every way possible. It is reported that one shipment alone into the city of New Orleans totaled seventy cars. Sales of nationally distributed trade-marked brands have suffered in every district in which the cheap unwrapped cakes have been introduced. It is interesting to note that a number of makers of these cheap soaps have been competing with their own nationally advertised brands. Even local manufacturers have pushed them in some cases at the expense of regular brands. Others have doubled the size of regular brands.

Soapmakers doing a national business must have realized that this would be the case when they first went into the cut-price market, indicating that the reasons for their entrance into this field were important ones. Small laundry soapmakers, serving local markets, had a prominent part in the development of the situation which forced large manufacturers to offer these giant unbranded bars in the first place. These local producers, buying their raw materials in most cases on a hand-to-mouth basis, have profited more from the declining fat and oil prices of the last two years than large soapmakers, who of necessity must buy their raw materials far ahead. These small soapmakers, buying materials only a few weeks before the finished soaps were to reach the market, were able to profit from each decline in the prices of rosin, grease and soap stock, and were the first ones to cut prices under those of the large concerns. In self-defense large producers cut back, each meeting the other in an effort to protect its markets.

The net result has been to boost the sale of soaps which leaves very little if any margin of profit. Sales of branded cakes on which the large manufacturers built up their national positions, have suffered materially. There may have

been some expansion in certain types of soap sales, but this has not aided producers since, in many cases, this increase in volume was obtained only by giving up all profit. It is probable that the gain in volume of sales through the giant bar has been small, certainly not an important enough factor to compensate for loss of profits. Sales of laundry soap are regulated more by actual need of consumers for soap than by any price concessions of makers. It is doubtful if much more soap could be sold under present conditions even if prices of today were cut in half. The usual result of a severe competitive war in the sale of a necessity whose use is bounded by actual need, is to cut the profit out of the market without any compensating gain. This has been the result in the rather shortsighted struggle in which laundry soapmakers have engaged. Each maker is now selling practically the same volume of soap as before, the difference being that sales of this type of soap are profitless.

A PERIOD of selling at cost could be accepted resignedly by makers as a phenomenon of the depression were it not for the serious consequences which this situation may hold for the future. Reductions in price are easy to make—advances are contested all the way along the line by buyers accustomed by experience to a lower idea of the value of the product involved. Present competitive prices cannot be considered stable as they are based on costs for raw materials which will not permit producers of these raw materials to continue operating indefinitely. Two years ago, the cost of the raw materials, alone, for a sixteen-ounce cake of even a very cheap laundry soap would have been well over the present selling price. When raw materials start their advance back to levels where they can be produced at a profit, soapmakers are liable to find themselves being ground between the two millstones of advancing costs and low selling prices. Reduction in wages paid to employees of soap companies has been resorted to during the past year as one means of avoiding this unpleasant future complication. A more direct step toward the same end could be employed by refusing to sell on the basis of present raw material costs. If soapmakers are not to be permitted a profit even with present low costs, how may they expect to operate profitably when the eventual rise in raw material costs comes?

Another complication of the giant bar being widely offered through the chain store is the usual reaction of the independent retailer who has always been one of the chief outlets for the well-known branded soaps. He is not unmindful of the sale of forty-eight ounces of soap for ten cents in the chains. That he does not take kindly

to it is only natural. That the manufacturer may have been more or less forced into it by both local and national competitive conditions, he does not consider. Twice as much soap is being offered for the money in competition to the regular brands which he carries, and his business suffers accordingly. His reaction is not one of friendliness to the manufacturers who make this possible, whether the manufacturers are national organizations or local factories.

A NOTHER view of the factors behind the present low prices in the bar laundry soap market may be found in an analysis of the losing fight which bar soaps have been waging in recent years with packaged flakes and powders. These have largely taken bar soap's former place with the better class trade. Packaged washing preparations have experienced a tremendous increase in popularity over the past ten years. With each successive change in the form of the packaged washing preparation, from powder to chips, flakes, and finally bubbles and beads, the sale of bar soap decreased. Two years ago the old-fashioned yellow bar stood with its back to the wall, appealing only to the low-price trade. The bar lacked the convenience and attractiveness of the packaged washing preparation, use of which was being extended by widespread advertising campaigns.

The story is rather different under present conditions. Buyers, anxious to save every possible penny, no longer disdain the yellow bar, and in the sections of lowest purchasing power tend to turn back to it under the stimulus of substantially reduced prices.

The packaged products are also feeling this competition, and are being subjected more generally to a type of competition similar to that faced by the branded bar soap. Grocery stores in the metropolitan area report a substantial increase in the sale of bulk chip soap at the expense of the higher priced packaged products. Manufacturers, unwilling to make sharp cuts on their established packaged brands, have not been averse to making reductions on bulk chips comparable in size to the price cuts which have been made on yellow bar soap. In one store visited, bulk soap chips of a good quality were being sold at less than half the price of the same quality in packaged form. The manager reported that sales of the latter had fallen off in proportion to the gain in the sale of the bulk product.

The same situation has also been noted in the toilet soap market. National sellers have been unwilling to see prices of their trade-marked brands cut ruinously low, but have been quick to supply the department store market with good

(Continued on Page 49)

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BARREME, France	SOUSSE, Tunis	CHUNG-KING, China
LA ROQUE-ESCLAPON	ANTALAH, Madagascar	TATSIENTU, China
RAHMANLARE, Bulgaria	SAINT-DENIS, Bourbon Is.	CAYENNE, Fr. Guiana
LES HESPERIDEES, Reggio, Italy	MESSINA, Sicily	

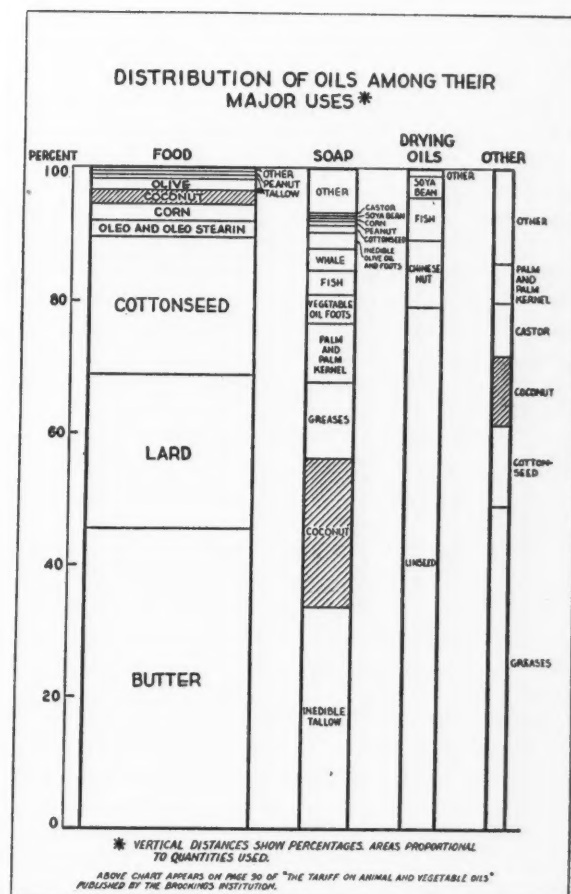
Say you saw it in SOAP!

Coconut Oil and the Philippine Situation

By J. D. CRAIG

Spencer Kellogg & Sons

OF the total coconut oil imported into the United States, 62 per cent is used by the soap industry and 15 per cent by the manufacturers of biscuits, crackers, and confections. In these fields, coconut oil is an indispensable raw material which cannot be replaced by any other fat or oil produced in the United States. About 25 per cent goes for other purposes, including the manufacture of margarin. The great bulk of coconut oil coming into the United States originates in the Philippines. If this Philippine oil were subjected to a tariff, it would merely mean that the soap and cracker industries would pay the increased price for their coconut oil. They could not switch to some other American produced oil as there is no home-produced substitute. They would continue to use coconut, tariff or no tariff. At the same time, a tariff as proposed would increase the price of coconut margarin on an average of about a cent per pound. In both cases, it is apparent that no appreciable



benefit would accrue to the American farm or dairy interests.

Now, turn to copra. This is on the free list for importation into the United States from all countries. If coconut oil imports were materially interfered with as the result of a tariff on Philippine oil, it seems logical to believe that the tariff would be circumvented by bringing in the copra and crushing it in the United States. There would probably be just as much coconut oil available and used in the United States as before. Thus, it is obvious that to give the Philippine complete independence or to place a tariff on their coconut oil, would do nothing else but represent out and out discrimination against the American crusher operating his mills in the Philippines.

Of the many strong reasons for crushing copra in the Philippines one of the most important is the desire to complete the crushing as soon as possible, thus avoiding the possibility of any deleterious effects due to long storage in ship holds. The sooner the copra is crushed, the less is the

chance for spoilage, development of rancidity or increase in the free fatty acid content. Furthermore, it is economically sound for American producers to crush a large part of their copra in the Islands, since they have no need of a further surplus of oil cake for which there is no domestic market. There is already a large exportable surplus of oil cake in the United States, and transferring that portion of the crushing now done in the Islands would further add to the present surplus a quantity ranging from eighty to one hundred thousand tons. This would certainly be of no benefit to American agriculture in general.

Coconut oil crushing by Americans in the Philippines was founded on a sound and logical basis, the main reasons for which have been given. If independence of the Islands and a tariff are to be forced upon the American crushers with mills in the Philippines, it seems only just that they should be given the time and opportunity to liquidate their investments, and at least be shown the same consideration as was given the Spaniards when they vacated the Islands thirty odd years ago.

Many erroneous contentions have been advanced by the "official spokesmen" of American agricultural and dairy interests in their efforts to shut out Philippine coconut oil and copra from the American market. These "official spokesmen" tell of 700,000,000 pounds of vegetable oils imported annually, and that "these huge importations go into the manufacture of butter substitutes." They tell of Philippine coconut oil going into direct competition with animal fats and cottonseed oil, and of "these cheap vegetable oils from the Philippines competing with every American farmer and every American acre." The actual facts of technology and limited inter-

changeability in usage of various oils and fats are completely ignored. They continue to insist upon comparing coconut oil with American products when there is no economic or technical basis for such comparison.

One-third of the coconut oil production in the world is consumed in the United States. It comes here in the form of oil made by crushing mills in the Philippines and also in the shape of copra from which the oil is extracted by mills in this country. Since 1922, coconut oil has carried a duty of 2 cents per pound, except that coming from our insular possessions with which we have free trade. Naturally, therefore, practically all of our imports of the oil come from the Philippines. Copra, on the other hand, comes in free of duty from all countries; hence, approximately 45 per cent of our copra imports comes from countries other than the Philippines and, therefore, is bought on an international price basis.

The "official spokesmen" of the dairy industry, who have been the most militant opponents of Philippine coconut oil, never reveal to the dairy farmers that 60 to 62 per cent of the coconut oil consumed in this country goes into soap for which purpose it is as indispensable as rubber in the manufacture of an automobile tire, and no more interchangeable with any other fat or oil produced in the United States than rubber is with leather in the manufacture of this same tire.

Not Soap Oil Producers

NO American agriculturist is deliberately producing any oil or fat for use in the production of soap, because all oils and fats produced in the United States with the exception of linseed oil, when recovered in their natural prime condition are suitable for edible purposes and find their



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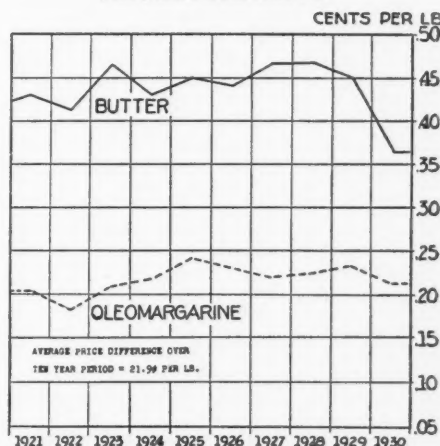
most valuable outlet for use in edible products. The American farmer is not lacking in shrewdness. He produces only the absolute minimum of the class of deteriorated oils and fats which are more generally used in the manufacture of soap. Hence, the domestic oil and fat production is nearly all edible and *the only competition from outside the United States which can affect the domestic oil and fat production is that which is of edible grade*, again excepting linseed oil which is not a soap making oil. In the great field of soap making oils and fats, American agriculturists are essentially interested in their capacity as consumers of tremendous quantities of laundry and toilet soap. Their interest as producers is only of fractional importance compared to their interest as consumers.

The manufacture and distribution of soap at low cost is dependent upon the supply of oils and fats which have deteriorated from their virgin condition. Hence, the manufacture of soap at reasonable prices is based upon the ability of soap makers to use oils and fats of all kinds which have so deteriorated in quality that they are no longer fit for food products. The United States imports a large volume of oils and fats for the manufacture of soap, and if examination of the quality of these importations be made it will be found that they are almost entirely of the grade which is unsuitable for edible purposes, or as is the case with coconut oil suitable for edible purposes only to a very limited extent.

Coconut Oil Non-competitive

COCONUT oil when used in the manufacture of soap is absolutely non-competitive with any domestic oil or fat for the simple reason that no domestic produced oil or fat has the same valuable soap-making properties. Coconut oil is necessary in order to incorporate into the soap the required qualities which the consumer demands in the way of abundant lathering, rapid rinsing, and thorough cleansing properties. To supply these qualities it is necessary to have present an appreciable quantity of sodium soaps of the lower molecular weight fatty acids, which, from the chemical analysis of the fats and oils, can only be obtained from the use of a liberal proportion of coconut oil in the soap formula. To produce abundant lathering the soap must be easily soluble in water at the ordinary washing temperatures. Naturally soap is dissolved much more slowly in hard water than in soft water, especially at ordinary water temperatures. The properties which make a soap easily soluble in water are the same properties which make the suds easily rinsed. No explanation is needed to show that a soap will not give the proper washing qual-

Average yearly wholesale prices of 92 score creamery butter (at N. Y.) and standard uncolored oleomargarine at Chicago for the ten year period from 1921-30.*



*Based on prices from the U. S. Department of Agriculture Year Book for 1930 pages 921-928.

Oleomargarine is manufactured in various parts of the United States. There are large factories in the New York area, although the Department of Agriculture Year Book records only the Chicago price of oleomargarine. The New York price does not differ materially from the Chicago price for comparable grades.

ities if it is not easily soluble in water at the temperatures at which the washing is done.

To produce the modern white laundry soap, either in cake, chip, or bead form now generally demanded by the American public, an appreciable percentage of coconut oil must be used in order to get the desired lathering, rinsing, and thorough cleansing qualities. The great majority of the cities in the United States and the farm areas west of the Appalachians, have fairly hard water so that a soap not easily soluble in this water is a poor cleansing agent, and soap that does not contain a good percentage of coconut oil will be quite insoluble in ordinary hard water. Hence, the demand for white laundry soap containing a sufficient percentage of coconut oil to make it perform efficiently under the conditions it is used.

When all the facts are considered from a scientific point of view, there does not appear to be a very strong foundation for the various claims advanced that domestic produced oils and fats are readily interchangeable with coconut oil in the soap kettle. As beforementioned, American agriculturists are intentionally producing no oils and fats for soap making, and the necessary lathering quality in soap cannot be obtained from any oils and fats produced from the United States soil, but instead are incorporated in the soap only by liberal proportions of coconut oil in the soap formula.

(Turn to Page 32)



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The Government Building at St. Denis, the capitol of the Island of Reunion

The Essential Oils of Reunion

The Commerce in Bourbon Geranium, Vetiver, and Ylang

THE severe storms and hurricanes which visit the Island of Reunion periodically make that island on frequent occasions a rather uncertain source of supply for the various products which it exports. This is especially true in the cases of essential oils and vanilla bean which are produced in Reunion. Only last month, a severe storm was reported to have caused sufficient damage to force up prices of Bourbon commodities sharply. This was particularly true in the case of geranium oil which was advanced for shipment from 165 francs per kilo to 225 francs almost over night. The advance focused attention on geranium oil in all markets of the world, as might be expected, and brought corresponding price advances in the United States of a dollar to two dollars per pound.

American essential oil importers and consumers, however, are sometimes inclined to take the reports of storm damage from Reunion with a grain of salt. Experience has shown that the damage from hurricanes is not always as bad as it is pictured in the cables and that the market has a bad habit of slipping back after American importers, and possibly French, German, and English importers, have contracted for the shipment of considerable oil. Importers of geranium have, as a consequence, come to view storm re-

ports with suspicion until they are proved otherwise. At the same time, they are required for self-protection to move their prices for spot oil in accordance with the cabled prices from Reunion. Then, there is always the possibility that the storm may have been a severe one, and as bad as it has been pictured.

REUNION (Bourbon, as it is sometimes known), an island possession of France lying in the Indian Ocean about 450 miles from Madagascar, is an important source of essential oils of commerce, especially geranium, ylang, and vetiver. Its climate and soil have proved particularly adaptable to the successful commercial growth of essential oil plants and the distillation of such oils has for many years maintained a position as the third ranking export industry of the Island. The essential oil export trade of Reunion increased steadily from 1913 to peak years in 1924 and 1925, according to the Chemical Division of the Department of Commerce. A cyclone in April, 1926, followed by heavy rainfall materially reduced the 1926 crop and plantings for 1927 harvesting. The growth of essential oil botanicals and their distillation has, however, shown a fairly good recovery in subsequent years. The following table shows the

volume and value in United States currency of essential oil exports from Reunion during the period 1922 to 1930 as compared with overseas shipments during 1913:

Year	Pounds	Value
1913	90,336	\$418,854
1922	166,489	534,344
1923	205,182	900,546
1924	276,425	1,342,356
1925	408,588	1,256,656
1926	355,195	732,864
1927	195,164	491,839
1928	218,022	642,107
1929	221,752	820,633
1930	176,649	544,150

Although other oil yielding botanicals have been experimentally cultivated on a small scale in Reunion, there are only three essential oil plants of commercial importance produced in that Colony, only one of which (vetiver grass) was originally indigenous to the island. *Cananga odorata*, from which ylang ylang oil is distilled, was introduced for experimental planting from the Philippines as early as 1770, while the rose geranium was brought in about 1880. There is no appreciable export of aromatic plant materials, distillation facilities being well developed on the Island. Geranium oil is the principal essential oil produced in Reunion, although vetiver and ylang ylang oils are significant trade items. The accompanying table shows the relative importance of these oils in the export trade of the Island.

Production and Value of Reunion Essential Oils

	Geranium Oil		Vetiver Oil		Ylang Ylang Oil	
	Pounds	Value	Pounds	Value	Pounds	Value
1913	82,425	\$357,376	4,069	\$20,831	3,842	\$40,647
1922	147,708	465,310	11,065	34,152	7,716	34,882
1923	182,982	809,919	17,791	70,729	4,409	19,898
1924	253,529	1,226,752	13,337	92,535	9,559	23,069
1925	381,535	1,075,849	20,344	156,235	6,709	24,572
1926	326,535	556,160	24,251	152,464	4,409	24,240
1927	158,731	330,168	28,666	97,489	7,767	64,182
1928	180,929	508,257	32,893	103,534	4,200	30,316
1929	180,257	640,194	30,225	97,857	11,270	82,582
1930	156,438	483,296	11,077	27,754	9,134	33,100

THE cultivation of geranium rose ranks second only to sugar as an agricultural pursuit in Reunion. The area devoted to its cultivation is estimated at between 25,000 and 30,000 acres. The chief producing districts are in the south and southwest sections of the Island, although since the early postwar period, cultivation in the northern district of Le Vent has been increasing. The crop is said to enjoy most favorable growth at altitudes between 1,300 and 2,000 feet, although some successful plantations have been reported on land over 3,000 feet above sea level. Geranium rose cultivation is largely an activity of tenant farmers or small individual landowners, financed in many instances by the plantation owners or by export brokers for a share of the crop or of the oil distilled.

The harvesting and distillation of the geranium leaves which yield the oil customarily takes place twice a year, between January and April and from August to October, the spring period being the most important. From 8 to 10 pounds of oil per acre is said to be an average yield under present conditions with existing dis-

tillation facilities. In the majority of cases, small portable stills are employed and shifted from place to place to avoid transportation of the leaves.

The geranium oil is purchased by brokers operating in the producing areas who buy the output of individual distillers in small lots for bulk sale or shipment to exporters or their agents in St. Denis. The exporters filter the oil, classify it according to standard grades and pack it in casks or metal drums for export shipment. From 92 to 95 per cent of the Bourbon geranium oils exported from Reunion are destined to France, from which point they are distributed to other consuming countries, because of France's direct shipping connections with this Indian Ocean colony. Small direct exports to the United States and Great Britain are recorded each year, but the major requirements of those markets for soap, perfume, and other allied uses are secured by transshipment from France.

There is fairly substantial production of vetiver oil in Reunion, since the plant from
(Turn to Page 115)

Soap and the Negro Buyer

"**M**ANUFACTURERS by their long and continued neglect of the Negro buying public in their advertising and sales campaigns are neglecting one of the best market outlets for soaps and household cleaning preparations," J. A. Jackson, business specialist with the marketing service division of the Department of Commerce, declared recently in an interview with the Washington representative of *Soap*. Jackson, in elaborating on perhaps this striking statement, said that he believed that Negroes buy 35 per cent of all the soap sold in the United States. He said that about 40 per cent of the race is employed as domestic servants of some kind. In the average sized city and town, a large proportion of the household servants, cooks, chauffeurs, maids, nurses, are Negroes. Except in the extreme North and West, a great deal of the household laundering is done by Negro women. Hotels, cafeterias, restaurants, clubs and apartment houses employ Negro chefs, dishwashers, porters, waiters and chambermaids. Most of these workers, Jackson said, have to use a great amount of soap and cleaning preparations in the performance of their tasks. The Negro cooks and maids require soap to wash dishes, to scrub floors and to clean the woodwork.

"Almost always the purchase of the soap or cleaning preparation is left up to the servant," Jackson said. "In the case of hotels, restaurants, large apartment houses and business offices where the buying is done through an office, a recommendation from the head porter, maid or scrub woman results in the buying of a particular brand of product for the cleaning operations."

"As far as I know, no soap manufacturer is advertising in the 126 Negro newspapers or the 30 or more Negro magazines. A great field of potentially large number of customers is being overlooked through this neglect of the race publications. Almost every Negro family, especially in the larger towns and cities, take one or more of these publications. Often the race periodicals are the only ones that are perused carefully, for they are naturally devoted to the things that interest Negroes."

Jackson said that Negro fairs, food shows, carnivals of various kinds and similar exhibits also offer an excellent advertising medium for

soap products. For instance, North Carolina is to have 17 Negro fairs this year. There are to be about 125 altogether in the South this year. The Colored Merchants Association, which controls 254 grocery stores in 10 cities in New York, North Carolina, Louisiana, Alabama, South Carolina and other states is planning to launch a series of food shows in its stores early this winter. The first one will be held in New York City. Dr. Julius Klein, assistant secretary of the Department of Commerce, is scheduled to be the principal speaker at the New York show.

Jackson said that the manufacturers should send their best equipped advertising men to handle exhibits of soap at these shows and at the Negro fairs, carnivals and other exhibits. Instead, whenever an exhibit is arranged for the potential Negro costumers, the least qualified clerk is usually put in charge, he declared. They commonly adopt a superior, haughty attitude, are discourteous, and probably hurt the sale of any product more than help, he said.

Jackson said that if one manufacturer of a few standard household and toilet soaps and general cleaning preparations were to spend a few hundred thousand dollars advertising in Negro publications, arranging intelligently directed exhibits in the fairs and food shows and try to reach the Negro buyer that he was sure the expenditure would bring in unexpected sales results. That a few companies, such as the Lever Brothers and Procter and Gamble, are having their advertising representatives or college girls distribute free samples of their soap products among the Negro families in cities having a large Negro population is a good indication of the growing realization on the part of the manufacturers of their neglect of this large group of customers.

United States exported 28,819,546 lbs. of laundry soap in 1931, the value of this being \$1,756,057. This compares with 37,866,423 lbs., worth \$2,533,552, in 1930. Exports in December, 1931, totaled 1,601,514 lbs., worth \$89,109.

The name of the American Tripoli Company, Seneca, Mo., manufacturers of cleansers and detergent raw materials, has been changed to Barnsdall Tripoli Company.

Coconut Oil

(From Page 27)

Coconut Not Interchangeable

THE chemical characteristics of the American produced vegetable oils of edible grade viz., cottonseed, peanut, corn and soya bean oils, make them of much greater value for use in the field of cooking oils and fats, and salad oils, a field in which coconut oil is entirely unfitted for use; for the same reason they are unfitted for use in the fields in which coconut oil is of greatest value, namely for soap and for fancy crackers and biscuits. In the field of consumption of cooking fats and oils in the United States, the principal consumable products are hog lard, vegetable shortening or lard substitutes and liquid cooking oils. For cooking and shortening purposes, these products must possess the necessary shortening qualities, must be white in color to conform to the long established standards of the American housewife, and furthermore must not foam nor sputter when heated to the high temperatures necessary for frying.

By comparing the chemical composition of the fats and oils of American agriculture with that of coconut oil one can readily see the impossibility of interchanging coconut oil with any other fats or oils in the preparation of the food products in which they are used as the fat base. In the accompanying table the detailed chemical composition of each of the domestic fats and oils is shown with that of coconut oil.

Chemical Composition of Fats and Oils¹

Glycerides of Saturated Fatty Acids in	Coconut %	Cotton Seed %	Corn %	Peanut %	Lard %
Arachidic	5.0	0.6	0.5	4.0	15.0
Stearic	7.0	2.0	3.5	6.5	24.5
Palmitic	20.0	0.4	8.0	8.5	
Myristic	45.0				
Lauric	10.0				
Capric	9.0				
Caprylic	2.0				
Unsaturated Fatty Acids					
Oleic	2.0	35.0	46.0	53.0	50.5
Linolic		42.0	41.5	25.0	10.0
Linolenic			0.5	3.0	
Lignoceric					
Solidifying Point in degrees F.	75-76°	32-39°	10-14°	28-37°	85-95°
Iodine Value	7.5-8.5	105-115	115-125	88-95	56-64

¹References
"Chemical Technology and Analyses of Oils, Fats, and Waxes"—Lewkowitsch.

"Edible Oils and Fats"—G. D. Elsdon.

"Jour. Amer. Chem. Soc. No. 42-1797"—G. S. Jamieson.

"Pamphlets" published by United States Bureau of Chemistry, Washington, D. C.

From a study of the chemical composition of the individual fats and oils shown in this table it can be readily seen that coconut oil contains large percentages of fatty glycerides not present in any of these other fats and oils and does not contain in any appreciable percentages the fatty glycerides which are the principal components in the fats and oils of American agriculture.

The domestic vegetable oils contain greater percentages of the unsaturated fatty glycerides of oleic and linolic acids but not such a high percentage of the saturated fatty glycerides of palmitic

and stearic acids as are present in hog lard. By the process of hydrogenation a portion of the oleic fatty glycerides is converted into the fatty glycerides of stearic acid and practically all of the linolic acid is converted into fatty glycerides of oleic and stearic acid. After the process of hydrogenation the chemical composition of these vegetable oils approaches more nearly that of lard in that it contains more of the fatty glycerides of oleic, palmitic and stearic acid and less of the fatty glycerides of linolic acid.

It is common knowledge that the fats and oils which possess the most desirable properties for use in shortening and cooking oils contain large percentages of the unsaturated fatty glycerides of oleic, palmitic and stearic acids. In comparing the analysis given on coconut oil it will be seen that it contains only a very small percentage of palmitic and stearic acid and an even smaller amount of oleic—only 2 per cent—with absolutely no linolic present. It is, therefore, impossible to increase the oleic, palmitic and stearic acid contents by converting through the process of hydrogenation any of the unsaturated fatty glycerides, for the simple reason that nature made coconut oil with all of these unsaturated fatty glycerides absent.

With Coconut Out—What Then?

ACCORDING to the report of the Secretary of the Treasury, in the fiscal year ending June, 1931, the consumption of coconut oil in margarine in the United States amounted to 156,000,000 pounds, not 600,000,000 or 700,000,000 pounds, as one would be led to believe from the erroneous statements made by some of the agitators for Philippine Independence. The total imports of coconut oil as such and in the form of copra expressed in terms of oil in this period amounted to 677,000,000 pounds, of which the Philippines supplied 77 per cent. The manufacturer of margarine used, therefore, only about 23 per cent of the total imports rather than 100 per cent, as stated by the would-be benefactors of the American Dairymen. If the manufacturers decided to cease making coconut oil margarine (which is very unlikely, no matter how high the duty on coconut oil) they would need only to find other ingredients to replace this 156,000,000 pounds of coconut oil, and not the total imports, as they have no interest in the balance of the coconut oil importations.

Coconut oil, when used in the manufacture of margarine, only serves to make it possible for the consumer of margarine to select for his table a product which is made from 100 per cent vegetable fats and oils as the fat or oil base. If any move were made, which resulted in a substantial increase in the price of coconut oil, it would merely mean that the consumer might have to pay more for this kind of margarine, or if he

were unwilling to do so, he would purchase other types of oleomargarine which are composed of mixtures of animal and vegetable oils, or entirely of animal oils and fats.

Since in the 1930-31 fiscal year, the United States manufacturers of margarine used 156,000,000 pounds of coconut oil, it is of interest to see the other raw materials available over and above what actually were used and which would have been used had coconut oil been unobtainable. Suppose consumers forgot their taste for coconut oil margarine (which they won't—duty or no duty), the manufacturers would only have to increase their use of these other raw materials.

On the basis of the census figures for 1929, exclusive of 4,200,000 pounds of hog lard and butter, there are 1,584 million pounds of domestic cottonseed oil, 16 million pounds of peanut oil, 133 million pounds of corn oil, 43 million pounds of neutral lard, 43 million pounds of edible tallow, 59 million pounds of oleo stearine, and 122 million pounds of oleo oil, which makes a grand total of 2,000 million pounds of domestic fats and oils available if needed for oleomargarine manufacture.

These fats and oils are all prime first-class margarine ingredients, none of them subject to duty, none of them going into products which sell at as high a price as margarine; hence, the margarine maker would have first call. Of course, he is using a small fraction of this domestic supply, having consumed in the fiscal year ending June, 1931, approximately 75,000,000 pounds, which leaves available 1,925,000,000 pounds, or about 96 per cent of the total still on the shelves. Why, then, should the margarine manufacturer be concerned if he is shut off from the Philippines and their coconut oil supply, granting it could be done (which it cannot be, duty or no duty)?

Out of the 6,200,000,000 pounds of edible oils and fats produced in the United States in 1929, there were exported 1,000,000,000 pounds, from which it can be seen that even if the margarine maker used domestic oils and fats in sufficient volume to displace the entire 156,000,000 pounds of coconut oil, it would still leave an exportable surplus of around 850,000,000 pounds of edible oils and fats. With such a huge exportable surplus, it would be very rash indeed to surmise that a duty on coconut oil would in any way increase the general price levels of these domestic oils and fats, particularly since the price of hog lard, the most heavily exported item, controls the balance of the edible group outside of butter, its price being that of the world price level which is not affected in any way by any American tariff.

With regard to the packing house by-product oils and fats, oleo oil, oleo stearin, and neutral lard, all of which are produced in large exportable

surplus, it is not likely that the increase in price necessary to keep them out of the export market and hold them in the United States if required here for the manufacture of oleomargarine would be sufficiently large to warrant any expectation that such increased price would be reflected in the minutest degree in the price paid by the packers for the farmers' beef cattle. Since it is extremely doubtful if the packer would feel that he could afford to pay any more for beef cattle on the hoof because of the increased price on the few pounds of oleo oil, etc., obtained from a beef steer, if the Philippines were liberated, no benefit can be seen as accruing to the live stock farmer from the liberation of the Philippines.

Certainly any venturesome individual, who sets forth to raise the price level of all domestic oils and fats, must recognize that in attempting to do it by tinkering with the price of 156,000,000 pounds of margarine ingredients, represented by coconut oil, he has at his disposal a very weak crowbar. The mass of the remaining margarine ingredients is too great to be moved by any such tinkering with the price of 156,000,000 pounds of oil and fat base of the kind of margarine which would be affected by Philippine Independence and tariff duties against Philippine coconut oil.

After the dairy interests, the most fertile field for those who seek to foster misinformation in respect to Philippine coconut oil, is in the cottonseed oil industry, yet it is impossible to see where in they have a legitimate basis for such propaganda, since coconut oil cannot be used for the same purpose for which the great mass of our domestic oil and fat production is used, viz., as cooking oils and fats, and salad oils. From the Census Report for 1929, it is seen that 85 per cent of the cottonseed oil, the chief vegetable oil produced in the United States, finds its use in the manufacture of vegetable shortenings or lard substitutes, salad oils and other cooking compounds. A meager 2 per cent goes into margarine, used in combination with certain animal fats in making animal fat oleomargarine, 1 per cent into miscellaneous industries and 12 per cent into the soap kettle. It should be borne in mind, however, that that portion which goes for soap making consists solely of the so-called "foots" or the refuse from refining, and at times a small amount of off-grade or damaged oil which is unfit for edible purposes.

Margarine and Butter Prices

ASSUMING that the cost of the margarine manufacturers' supply of coconut oil could be inflated to the extent of the 2-cent tariff, it can be seen that no margarine, either the vegetable or animal variety, is a factor in determining the price of butter. The controlling factors which

(Continued on Page 113)

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Contract or Spot Delivery

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NEW YORK

Say you saw it in SOAP!

NEW PRODUCTS



NEW products and new packages for old products seem to be the order of the day. Manufacturers are apparently taking advantage of a lull in general activity in their plants to make wholesale changes in both products and packages. Some manufacturers are meeting increased sales resistance by adding new products to their line, strange as it may seem at this time, and are offering wider lines in the soap, shampoo, cosmetic, sanitary products fields. Others are putting out lower priced lines of old products under new names, and some are meeting the call for lower prices by expanding their lines of regular articles into the ten-cent field.

Above is shown the new "companion" line for the ten-cent store trade of the George H. Nowland Company of Cincinnati. The Petrolin Hair Tonic and Brilliantine are products which have been marketed by this old and well-known house for a number of years. The packages, however, have been changed for this particular business and two new items have been added to the group, a liquid shampoo and a wave set lotion. In keeping with the new "companion package" idea, all carry the same general style of label, and the

same trade-mark name. The bottles and closures for all four items are the same throughout.

Clark Nowland, president of the company, in discussing the new products, stated: "This new group of products is merely the answer to new times—standard, well-known branded goods, readapted to meet the needs of the ten cent market, the size which seems to be having the greatest sale. This is being done without reduction in quality of products or packages. We intend to extend our companion group for the chain store trade to take in additional items."

Several rather startling packages for hand soap, especially a product designed for bathroom use, have come out during the past six months. Manufacturers who have specialized in putting out lines of hand soap or mechanic's paste in packages primarily of a utilitarian character are reaching out after the home trade by marketing the same general kind of product in more fancy and elaborate containers. The first movement in this direction was made some time ago for hand soaps by the development department of the Anchor Cap & Closure Corporation which worked out a package which they termed was



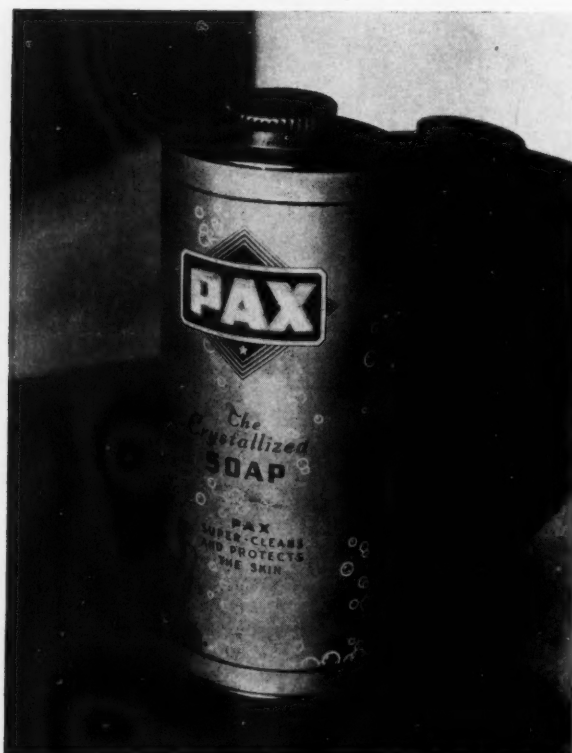
"designed to take hand soap out of the garage and put it in the bathroom of the home." Here-with is shown one of the latest type packages for hand soap for home use designed for the soap manufacturer by that company.

Revamping of packages goes on in various fields. Hand soaps, shampoos, lotions, polishes, and allied products are undergoing numerous changes in the manner in which they are pack-



aged. Even shoe polishes and creams which used to appear in the most prosaic containers are answering the demands for better looking bottles and cans. "Shu-Care" is a new type product in a new dress. The package was designed and manufactured by the Owens-Illinois Glass Company.

The fibre can becomes the container for another soap product. "Pax" adopts an oval fibre container. The product is a special powdered hand cleanser. The package shown here is the home-use size. The product is also packed in two-pound cartons for use in dispensers. The fibre



package is about five and a half inches high by two and a half wide. It has metal top and bottom finished in brass. The can carries a paper label in silver and green. The container was designed and manufactured by the Sefton National Fibre Can Co. of St. Louis.

The F. W. Woolworth Co. put into effect a new policy on March 1, and is now offering in 100 of its retail branches in the South and West new lines of merchandise priced as high as 20 cents. This departure from the old "Nothing over ten cents" slogan came as a result of generally reduced prices which have brought into the twenty cent purchasing range many types of goods which previously sold at a much higher figure. If the plan is successful it will be extended to the other 1,805 stores in the Woolworth chain.

SECURITY PRICES

PRICES of stocks of soap, chemical, insecticide, and allied companies as quoted on the New York Stock Exchange, Curb Exchange, other exchanges and over-the-counter are given in the following table. This table of prices is compiled monthly for *Soap* by a representative of one of the oldest and best-known brokerage houses in New York.

	High 1932	Low 1932	Feb. 1 1932	Mar. 1 1932
Allied Chem.	83½	62¼	69¼	77
Am. Agric. of Del.	7½	5¼	5½	5¾
Amer. Cyan. "B".	4⅞	2⅞	3⅞	3⅞
Armour of Ill. "A"	1½	1	1¼	1⅜
Bon Ami "A" ...	51	48	50	49
Brillo	6⅝	6⅝	6⅝	6⅝
Colgate, P. P. ...	30¼	26⅞	29¼	29⅞
Corn Prod.	46	37	42	44⅞
Coty	4¾	2⅝	3¼	3¾
Dow Chem.	36	29⅞	32	34½
Drug, Inc.	57	47⅝	52¼	52
Du Pont	59¾	46⅞	52¾	54½
Glidden	6	4¾	5½	5¼
Gold Dust	19⅜	16	16¾	17⅜
Gulf Oil	32	25⅝	29⅝	29¾
Heyden	8½	6½	6½	8¼
Int. Agric.	1½	¾	1⅞	1
Lehn & Fink	23	19⅞	21¾	21
Mathieson	18¾	13¼	14¾	15¾
McKess. & Rob. .	5½	3⅞	4⅞	4
Monsanto	25	20¾	22½	24
Newport "A" ...	No Sales in 1932			
Proc. & Gamb. ..	42¾	37⅞	39⅞	40
Shell Union	4	2¾	3½	3⅝
Sher. Will	35	31¼	33½	32½
Sinclair	7¼	4¼	5⅞	6⅞
S. O. of Cal.	27	22½	23½	24⅞
S. O. of Ind.	16⅞	14	15¼	15¾
S. O. of N. J. ...	30½	25⅞	27¼	28¼
S. O. of Ohio	28½	23¾	24½	25½
Swift & Co.	18⅞	16⅞	18	18⅝
Union Carb.	34½	27¼	30½	32⅞
Westvaco	12	9	10¾	11¾
Wilson & Co.	1	¾	7/8	1

Northam Warren Corporation reports net income for the year ended December 31, 1931, of \$816,708, after all charges, including provision for taxes. This compares with net income of \$807,014 for the year 1930.

Hummel & Robinson, industrial chemicals, New York, have filed a petition in bankruptcy listing assets of \$42,821 and liabilities of \$56,579.

Gold Dust Earnings Lower in 1931

The Gold Dust Corporation reports net profit for the year 1931 of \$3,513,648, equal after preferred dividends to \$1.75 a share on the 1,817,902 shares of common stock. This compared with a net profit of \$6,688,816, or \$3.51 a share for 1930. The company completed the payment of its bonds during the year with the maturity of \$1,061,000 in debentures. Accounts payable were also reduced to \$3,684,155 from \$4,163,476 and total current liabilities stood at \$5,935,959, against \$7,692,525 a year ago. Current assets were \$20,119,778, a drop of about \$2,200,000, due largely to the reduction of inventories from \$10,986,098 to \$8,037,296. Cash was \$3,857,180, against \$7,823,131 at the close of 1930. The company has a \$5,160,012 investment in United States Government securities.

P & G Workers Share \$926,000 in 1931

Profit-sharing dividends received by employees of Procter & Gamble Co. during 1931 totaled \$926,000, the largest amount ever distributed under the stock ownership plan which was put into effect by Colonel William Cooper Procter in 1887. Employees either own outright or have subscribed for 217,000 shares of the company's common stock, which at present levels has a market value of about \$8,680,000. In 1930 the company paid to employees \$984,562 in profit-sharing dividends, the largest amount distributed under the plan and \$200,000 more than the total distributed in 1929. A year ago it was stated that the employees had owned or subscribed for 333,599 shares of stock, which then had a market value of \$23,000,000.

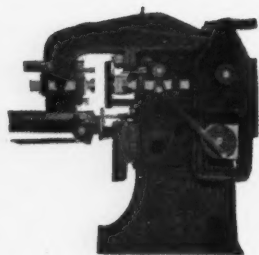
Drug, Inc., and subsidiaries in the year ended December 31, 1931, had net profit of \$19,433,237, after depreciation, interest, federal taxes, minority interest, etc., equal to \$5.55 a share on 3,501,499 shares.

The Archer-Daniels-Midland Company has reported a net income of \$444,873 for the six months ended December 31, 1931, after depreciation and Federal taxes. This was equal to 59 cents a share on 549,546 common shares after preferred dividends.

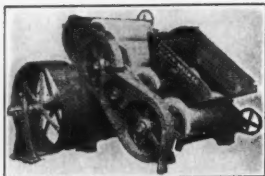
The financial report of the Lehn & Fink Products Company for the year ended December 31, 1931, showed a net profit of \$1,451,163. The net was equal to \$3.46 a share on 419,166 shares of no-par capital stock and it compared with a net profit of \$1,706,771, or \$4.07 a share, for the year 1930.

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This 4-roll granite toilet
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DRYERS—Two Proctor &
Schwartz Large Roll Soap Chip
Dryers Complete.

Three Proctor & Schwartz Soap
Chip Dryers with five Chilling
Rolls. Devine Double Drum
Vacuum Dryer.

Proctor & Schwartz Bar Soap
Dryers.

Condon & Huber Soap Chip
Dryers.

SOAP CRUTCHERS—Houchin-
Aiken, Dopp & Doll Steam Jack-
eted Crutchers, 1000 lb., 1200 lb.,
1350 lb., 1500 lb., 1800 lb., 3000
lb., 6000 lb. and 10,000 lb.

SOAP PRESSES—Jones, Machin-
ery Designing, & Ralston Auto-
matic Presses for toilet and
laundry soap. Dopp, Crosby &
Empire Foot Presses.
Scouring Soap Presses.

GRINDERS & MIXERS—Day
Jacketed Marshmallow Mixers,
Pony Mixers, Talcum Powder
Mixers, Rouge Mixers, Ointment
Mill, etc. Schultz O'Neill Mills.

SOAP CUTTING TABLES—
Houchin-Aiken Steel Automatic
Table with self-spreader and ex-
tra headers.

Wooden Tables with and without
self-spreader attachments.

SOAP SLABBERS—Houchin-
Aiken, Curtis-Davis, Dopp & New-
man's Hand and Power Slabbers.

TOILET SOAP MILLS—2, 3, 4, 5
and 6-roll Granite Soap Mills.
Houchin-Aiken 4 and 5-roll Steel
Mills.

Buhler 3, 4, 5-roll Steel Mills.

PLODDERS—Houchin-Aiken,
Rutschman & Allbright-Nell 6",
8" and 10" Plodders.

SOAP POWDER MACHINERY
—Blanchard No. 10-A and No. 14
Soap Powder Mills.

Broughton Soap Powder Mixers.
Wms. Patent Crusher & Pulver-
izer.

Sedberry Crusher, Grinder &
Pulverizer.

A-N 5x7 Crystallizing Rolls.

FILTER PRESSES—Sperry, Per-
rin & Shriver Cast Iron Filter
Presses 12", 18", 24", 30" and 36".
International and Monopod Fil-
ters.

VARIOUS OTHER ITEMS—
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lb., 1200 lb., 1500 lb., and 1800
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Automatic Soap Wrapping Ma-
chines.

Steel, Copper and Aluminum
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ing Machine for cleansers, etc.

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Our Forty Years of Soap Experience can help solve your Soap Problems

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Report on German Soap Industry

A report on the German soap and cosmetics industry released by the Reichstag Commission of Inquiry estimates the total value of production of the combined industries at 570,000,000 marks annually. Of this total, 400,000,000 marks represents soap production, the remaining 170,000,000 being split between cosmetics and perfume. German soap exports have increased enormously in recent years, the value of these for 1930 being 25,980,000 marks, as against 17,360,000 in 1925 and 9,920,000 in 1913.

An outstanding feature in the development of the soap industry is the great expansion in the manufacture and use of soap flakes and powder at the expense of other soaps. The production of soap powders has increased 300 per cent since prewar. Another popular product which is showing expansion is the oxygen-containing type of detergent, the annual production of which is valued at 130,000,000 marks. There is also a marked increase in the use of toilet soaps and cosmetics as compared with prewar standards, this being due to a higher average standard of living and more advanced hygienic ideas.

The soap and cosmetics industry has undergone a far-reaching process of concentration which has resulted in 67 concerns accounting for 50 per cent of all employees in the soap branch. Some concerns are of overwhelming importance in the soap and cosmetics industry. One combine embraces four divisions, each formerly an individual manufacturer. Another large group accounts for most of the production of flakes, powders and cleansers. All larger German soap manufacturers belong to a national association called "wirtschaftsbund der deutschen Seifen-industrie."

In analyzing cost of production in the soap industry, the report emphasizes the high expenditures for sales promotion and advertising which amount to between 15 per cent and 38.5 per cent of total expenditures. The cost of production proper consists of raw materials, 45.9 per cent to 71.7 per cent and the cost of manufacture, 9.3 per cent to 25.8 per cent. The retail dealers' mark-up represents 20 per cent to 33-1/3 per cent of retail prices in the case of household soaps and detergents.

DuPont Cellophane Co. has filed suit against Sylvania Industrial Corp., makers of glassine paper, charging patent infringement in the manufacture of its moisture-proof wrapping material.

Tamms Silica Co., 228 North La Salle street, Chicago, has issued a new catalog containing much information of value to users of silica. Copies will be mailed on request.

December Glycerine Imports Higher

Imports of refined glycerine into United States during the month of December, 1931, rose sharply, totaling 633,506 lbs., worth \$39,919, as compared with the totals for November of 390,547 lbs., worth \$22,549. Crude imports were also up in December, standing at 779,880 lbs., priced at \$33,061, as against 518,235 lbs., worth \$22,754, in November. The following figures give in pounds the imports of glycerine into the United States over a period of years:

	Refined	Crude
1923	585,792	14,548,660
1924	1,500,644	14,427,054
1925	2,043,606	19,264,654
1926	10,839,093	27,658,552
1927	8,288,574	14,943,670
1928	4,217,943	4,951,651
1929	5,381,684	14,951,901
1930	3,136,809	12,144,193
1931	1,975,970	10,131,963

Oil Traders Re-elect Weihman

Clifford T. Weihman, Smith-Weihman Co., New York, was re-elected president of the Oil Trades Association of New York for the coming year at the annual meeting held in the Waldorf-Astoria hotel, March 8. Other officers chosen included: William S. Williams, Asiatic Petroleum Corp., vice-president; Joseph C. Smith, Smith-Weihman Co., secretary; Philip C. Meon, Borne-Scrymser Co., treasurer, and Albert J. Squier, chairman of the entertainment committee. These, together with the following will constitute the board of directors: George Suraud, Chelsea Oil and Supply Co.; Edwin Stern, Louis Stern Sons, Inc.; W. H. Correa, Standard Oil Company of New York; J. W. Saybolt, Standard Oil Company of New Jersey; H. Mart Smith, W. R. Grace & Co.; John W. Baker, Philippine Refining Company of New York; E. C. Biglow, Sun Oil Company; D. T. Bloodgood, United Africa Co.

Mr. and Mrs. David A. Bennett sailed for New York on the *Europa*, March 9, after a month spent in Europe. Mr. Bennett, president of Albert Verley, Inc., Chicago, conferred with his foreign principals, Etablissements Albert Verley and Tombarel Freres, while in France.

Anchor Cap and Closure Corp., Long Island City, has prepared a folder outlining the arguments in favor of the companion package. This device is particularly useful in introducing a new item to an established line, they say. It can also be used to increase the average sale, as it appeals to the buyer's bargaining instinct. Copies of the folder will be supplied on request.

CHICAGO TRADE NOTES

THE Chicago Perfumery, Soap and Extract Association has announced a change in its policy of holding meetings. Heretofore gatherings have taken place twice each month, on the first and third Wednesdays, in the form of luncheon meetings at the Midland Club. Beginning in February, however, only one meeting will be held each month, on the first Thursday. A schedule has not yet been prepared, but various places will be selected and novel entertainment features will be presented at different times. It is probable that some of the meetings will be take place at the dinner hour in the evening while others will be held at lunch time, as in the past. The administration feels that such an arrangement, offering a variety of attractive programs, will attract members in greater numbers than under the old system. This prediction proved correct in the instance of the first meeting, at least, which was held at the Illinois Athletic Club at 6:30 P.M. on Thursday, March 3d. Over fifty members and guests were present on this occasion, and there were many indications that the fresh spirit of interest would spread. President Donald M. Clark pointed out that gatherings of this type would undoubtedly attract new members, and so weld together even more closely the members of the cosmetic and allied industries in Chicago. Endeavor will be made to secure a prominent speaker for the March meeting.

The Chicago Drug and Chemical Association held its first meeting of the new year in the form of a luncheon at the Hamilton Club on Thursday, January 28th. About eighty members were present. After business had been disposed of they listened to Frederick A. Cook, polar explorer, the title of whose address was: "Adventure from Pole to Pole."

Sleet Products Co., established at 32 North Green Street, Chicago, for the purpose of manufacturing and distributing soap and cleaning compounds, incorporated recently, issuing \$10,000 worth of common stock. The incorporators were, Morris Kartoon, Max Tunkel and Louis B. Davis.

Lady Patricis Co., 120 North La Salle Street, Chicago, was recently incorporated to deal in all kinds of cosmetics. The incorporators were, L. H. C. Meland, Edythe Meland and Wm. G. Shane.

A. M. Burgh, former chemist at Marcelle

Laboratories, with whom he was associated many years, recently organized Eunice Laboratories, a new concern which will manufacture and distribute cosmetics at 5231 George Street, Chicago.

Allen B. Wrisley Co., of Chicago, recently put an interesting radio feature on the air from WJJD, at the Palmer House, in connection with an advertising campaign for Oliv-i-lo Soap. Prizes were offered for those submitting the greatest number of words derived from the letters of this name.

A. J. Dedrick, recently appointed representative for Albert Verley, Inc., has recovered from the injury he sustained in a recent automobile accident and is back at work again.

The annual Packaging Exposition was held in Chicago, at the Palmer House during the week of March 7th to 12th. Innovations in containers were displayed to a large number of visiting manufacturers each day.

The cosmetics and perfumes known as the Seventeen line, first placed on the market in 1930 by the Colgate-Palmolive-Peet Co., will hereafter be marketed under the charge of a new company, Maison Jeurelle, Inc. On February 1st Maison Jeurelle was incorporated for the manufacture and distribution of these products. Frank Head, formerly with the Owl Drug Company at San Francisco, has been appointed general manager in charge of distribution of the new line.

Continental Can Company, Chicago, has bought several acres of ground in Houston, Texas, for the purpose of building a new plant. The company's southwestern offices, formerly at Dallas will also be located in the new quarters. Further activities include the remodeling of a plant in Cincinnati and the building of a warehouse in Jacksonville, Florida.

Frank H. Pettee, Secretary of the Chicago Perfumery, Soap and Extract Association in 1928 and 1929, has written his first book. It is a story for children, called "The Orange Cat," and will be published by the Reilly & Lee Co., of Chicago, on May 2nd.

The Official Testing Laboratory, 191 Franklin street, New York, has been taken over by Foster D. Snell, Inc., Brooklyn, consulting chemists. R. O. Brooks, a director of Official Testing Laboratory since its formation in 1905, becomes a member of the technical staff of the Snell organization.

U. S. 1931 Soap Consumption Higher

Soap consumption, per capita, in United States, was approximately 25 pounds in 1931, two and one-half pounds more than two years ago, according to a survey made by Procter & Gamble Co. Annual per capita consumption in Europe is estimated at 4 pounds. The value of vegetable oils used in soap manufacture exceeded slightly the value of animal fats, tallow, grease, fish oil and similar products. Vegetable oils totaling 104,712,586 gals., valued at \$62,725,212 and animal fats and oils totaling 754,912,310 lbs. valued at \$61,735,884 were used in 1929 soap manufacture.

Palmolive Loses Tax Suit

An injunction suit brought by Palmolive Co. against the Wisconsin State Tax Commission, in which the soap company sought to escape payment of a \$200,000 income tax on its Milwaukee plant, has been decided in favor of the Tax Commission by the United States Circuit Court of Appeals for the Seventh Circuit. The original decision by the Federal Court for the western district of Wisconsin was that Palmolive Company had by means of certain intercompany contracts, particularly a cost-plus contract between itself and an affiliated Wisconsin company, manipulated its organization to reduce the income attributable to Wisconsin property and business. The Wisconsin Tax Commission, the court ruled, could, under such circumstances, determine the amount of taxable income on the basis of reasonable profits which would have been obtained but for the intercompany agreements.

F. T. C. Cites Dr. West's Toothpaste

A complaint filed by the Federal Trade Commission charges Western Bottle Mfg. Co., Chicago, makers of Dr. West's Tooth Paste, with unfair advertising in the sale of this product. Claims that tests on a group of dentifrices were conducted by a great University were found to be unsubstantiated. The commission also questioned the truth of the statement that this tooth paste was the only one of ten found to clean safely and declared the use of the trade name "Dr. West's" to be deceptive, in view of the fact that the dentifrice is not the product of the professional skill of an individual, Dr. West.

John A. Kienle, vice-president and director of sales of Mathieson Alkali Works, has been elected president of the Compressed Gas Association for the year, 1932.

Chas. B. Chrystal Co., fillers and abrasives, has recently occupied new quarters at 11 Park Place, New York.

H. Newman, Soap Pioneer, Dies at 72

H. Newman, founder and head of Newman Tallow & Soap Machinery Co., Chicago, died suddenly early last month. Mr. Newman had been seriously ill several months ago, but had been improving steadily to the point where he had been at the office regularly. Mr. Newman was a pioneer American soap manufacturer, prior to the organization of his machinery company. He came to the United States from Hungary over fifty years ago to start the Aurora Soap works, Aurora, Ill., manufacturing laundry and toilet soaps and soap chips.



H. NEWMAN

He was well equipped for the soap business, having worked in his father's soap factory before coming to America. When his Aurora plant burned down he established a new company in Chicago under the name of Columbia Soap Co. In this plant he was one of the first in the United States to make wet noodle soap chips.

While operating his soap factory, Mr. Newman also dealt in used machinery, tallow, oils, grease, etc., as a sideline. About twenty-five years ago he sold the soap company to concentrate entirely on the sale of used equipment and soap raw materials, having been the first to make a specialty of the used soap machinery business. Now, in addition to handling used equipment and tallow, the company offers a comprehensive line of new soap machinery. Mr. Newman is survived by eight children, including Joseph and Irwin Newman, who have been associated with him for several years and who will continue the business.

"The Physical and Chemical Nature of Soap" was the title of an address made by Dr. R. H. Ferguson, Procter & Gamble Co., before the Virginia section of the American Chemical Society.

Ward E. Jewett, in charge of the recently established specialties department of the Industrial Chemical Sales Co., New York, has announced the development of several new products of interest to soap and allied manufacturers in addition to isopropyltoluene which has been introduced recently under the name of "Cymanol" for low-cost perfuming. The new materials include a by-product rosin soap stock and a new filler material of rather interesting properties to soap manufacturers, he states. Mr. Jewett was formerly in the sales end of kieselguhr and activated carbons.

When it comes
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with perfume materials, we are in position to furnish
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Say you saw it in SOAP!

PERSONAL AND IMPERSONAL

Homer Banta, president of Iowa Soap Co., Burlington, Iowa, has been honored by election to the post of vice-commander of the Iowa department of the American Legion. Recently he served as chairman of the Citizens' Volunteer committee in a campaign organized to strengthen the positions of financial institutions of Burlington.

Procter & Gamble Co. has announced the appointment of R. Z. Smiley as manager of its Kansas City plant. He is succeeded at the Long Beach, Cal., plant where he has been in charge since its opening, by Donald E. Marshall.

Mrs. Russell Young, thirty years of age, wife of Russell Young, vice-president of the Davies-Young Soap Co., Dayton, Ohio, died March 1, following the birth of a son. Funeral services were held March 3 at her home, and burial was in Woodland Cemetery, Dayton. The child, Clinton Russell Young, is reported doing nicely. There is one other child, Caroline, three years old. Mrs. Young was the former Marie Louise Clinton and a native of New Orleans.

Dr. Martin H. Ittner, chief chemist of Colgate-Palmolive-Peet Co., spoke recently on the subject, "Soaps," before the Student Chapter of the American Institute of Chemical Engineers at Cooper Union, New York.

George Zirkelbach, formerly assistant controller of the Palmolive Co., and associated with the company over a period of 15 years, died Feb. 5, at Mount Pleasant, Ill., after a short illness.

J. B. Burwell, formerly chemist for Canton Oil Co., has joined Metasap Chemical Co., Harrison, N. J. His duties will include demonstration work on the uses of metallic soap in grease compounds.

Colgate-Palmolive-Peet Co. has announced personnel changes which bring E. F. Berndt from Pittsburgh to the Boston office where he will have charge of toilet goods sales. G. F. Draper, formerly in charge of Chicago sales, will take his place as sales manager of the Pittsburgh toilet

goods division, and C. E. Johnson, formerly head of the Boston office, will become Chicago sales manager.

Endorsement of Kolynos dental cream, made by Kolynos Co., New Haven, Conn., has been denied by the A. D. A. on the grounds that therapeutic, chemical and bacteriological claims made for the product are not supported by adequate evidence.

Kentucky Chemical Works, soaps, Lexington, Ky., has moved its plant to 161 Ransom Ave., from the former location at 107 Church street.

Sierra Nevada Soap Co., headed by H. H. Luce, has purchased the business of Commercial Soap Co., Reno, Nevada, from its former owner, August Frohlich. Extensive improvements are planned which may include erection of a new factory at another location. An intensive sales campaign throughout Nevada and the surrounding states will be inaugurated. The sale of the company does not provide for the transfer of the site on which it stands. Commercial Soap Co. was organized at Virginia City, Nev., in 1876, moving to Reno about twenty-five years ago.

Julius Anghel and Neuman & Schwiers Co., New York, have successfully opposed two duty assessments made by New York customs officials. The duty on "Elida" powdered soap was reduced from 75% to 30%, and in the second case the duty of 15% was accepted rather than one of 30%.

Lever Bros., Ltd., has extended its capital investment in United Africa Co., recently to the point where it now holds an eighty per cent interest in the latter concern. An offer of a £1,200,000 issue of stock failed to find support, with the result that it was necessary for the Lever interests to supply additional capital. Formerly a joint controlling interest was held by Lever Bros. and African and Eastern Trading Corp.

Batjer & Co., New York, has been successful in having the duty rate on soap which it imported reduced from 30% to 15%.

The U. S. Circuit Court of Appeals for the Seventh (Chicago) Circuit recently heard argument by the attorneys for James S. Kirk & Co. on the latter's petition to review and set aside the commission's order directing it to cease and desist from using the words "Castile" and "Olive Oil Soap" in describing soaps, the oil or fatty composition of which is not derived wholly from olives. The petition to review originated early in 1929.

Reports made at the annual meeting of the Iowa Soap Co., held at the company plant, Valley street, Burlington, Iowa, showed the company had a good year in 1931. Homer D. Banta was re-elected as president. Other officers include F. Albert Klein, vice-president; E. O. Matsch, secretary and treasurer; John Blaul, F. Albert Klein, Milton Blaul, H. D. Banta, E. O. Matsch and C. E. Sawyer, board of directors.

Albert F. Curtis, former department head at the Staten Island, N. Y., plant of Procter & Gamble Co., died of apoplexy, February 8, at the Alexian Brothers Hospital, Elizabeth, N. J.

William J. Lawrence, president of Paper Makers Chemical Corporation, a unit of Hercules Powder Company, has been elected a director of Hercules Powder Company. The Hercules board has declared the regular quarterly dividend of \$0.75 on the common stock, payable March 25 to stockholders of record March 14.

The American Home Products Corporation has reported net profits of \$3,374,910 for the year ended December 31, 1931, after depreciation, taxes and foreign exchange adjustments. The net was equal to \$5.52 a share on 611,000 common shares, and compared with \$3,361,005, or \$5.50 a common share, in 1930.

The annual convention of the American Manufacturers of Toilet Articles will be held in New York, April 26, 27 and 28. The scene of activities will be a hotel to be selected by the convention committee.

A dispatch from Seattle, Wash., states that plans are under way to build and outfit a million dollar whaling fleet to operate in the Antarctic out of Seattle. Keels for four whaling vessels to cost about half this sum are to be laid at once.

Filtrol Co. of California, filtering materials, Los Angeles, has moved its offices from 650 S. Spring street to 1755 Downey Road.

Lever Bros. Co. plans extensive additions to its Hammond, Ind., plant, a contract for construction having been awarded to Stone & Webster Engineering Corp., Boston. The cost of the new addition which will be completed in about seven months' time, is given as \$100,000. When complete, approximately 70 persons will be added to the regular staff.

Maison Jeurell is reported to have taken over the Colgate-Palmolive-Peet Co. "Seventeen" line. The latter concern will continue to act as distributors of the line.

Dr. Dale S. Chamberlin, a former member of the faculty of Lehigh University, has joined the research staff of National Oil Products Co., Harrison, N. J.

Karl Kiefer Machine Co., Cincinnati, has issued a 12-page booklet on the cleaning of glass containers. Kiefer equipment described includes cleaners, rinsers, sterilizers and driers.

The Food and Drug Administration has detained a case of tar soap, offered for entry at the port of New York, on the grounds of false therapeutic claims.

The annual dinner of the Drug, Chemical and Allied Trades Section of the New York Board of Trade is being held on the evening of March 15, in the Hotel Commodore. The attendance total was estimated by Ray C. Schlotterer, secretary, at close to 1,000.

Sowers Manufacturing Co., Buffalo, N. Y., has issued a new catalog, No. 8, showing and describing "Dopp" equipment for heating, cooling and mixing. Several installations of "Dopp" soap crutchers are shown. Copies of the new catalog may be obtained by addressing the company at 1296 Niagara street, Buffalo.

Frank E. Wilson, sales agent for Hydrox Products, New York, has moved his office and warehouse to 30-59 41st street, Long Island City, N. Y.

George S. Fowler, advertising manager of Colgate & Co. from 1909 to 1925, and more recently president of Pictorial Review Co., has resigned the latter position.

Western Purchasing Co., El Paso, Texas, has recently suspended operations.

ON PRODUCTS AND PROCESSES

Germicidal value of soap was tested on the skin of guinea pigs. Regular toilet and laundry soaps were found to be without germicidal value. A soap containing one per cent of mercuric iodide, however, was found to be an effective germicide.—*Jour. Lab. Clinical Med.*, 16, 391, 1931.

—o—
A fine soap powder is formed by first beating and aerating a strong soap solution to form a foam, which is then mixed with sodium carbonate solution and finally with caustic soda. The creamy mass is allowed to stand with frequent agitation. It eventually gives a product which readily disintegrates into a fine powder. Trisodium phosphate, wetting agents, and other detergent substances may also be mixed with the foam.—German Patent No. 534,457.

—o—
A modification of the Kreis Test for rancidity is as follows: In a test tube of suitable size, take 1 cc. of oil or melted fat and an equal volume of concentrated hydrochloric acid. Prepare a wad of white cotton and moisten it, at the place where it is to be introduced into the tube, with about 1 cc. of 1% ethereal solution of phloroglucinol and ten drops of 20% or stronger hydrochloric acid. With the walls of the test tube free from fat or oil, shove this wad of cotton down into the tube. Shake one to two minutes, but take care not to spatter any fat or oil on the cotton. Heat the fat carefully to about 60 deg. on a water bath if required. The presence of epihydrinaldehyde causes the formation of a red spot on the white cotton.—*Zeit. Angew. Chem.*, 44, 873, 1931.

—o—
Of the various antioxidants being used in Europe for preserving soaps and preventing rancidity, compounds made up chiefly of sodium thiosulfate are held to be most effective, and owing to their low cost do not materially increase cost of production.—*Perf. & Essen. Oil Rec.*, 22, 3, 89.

—o—
A new method for determining degree of rancidity is stated to be more reliable than the Kreis Test. The method is based on the fact that peroxides liberate free iodine quantitatively from barium iodide in glacial acetic acid and the iodine freed by peroxides present in rancid fats or oils

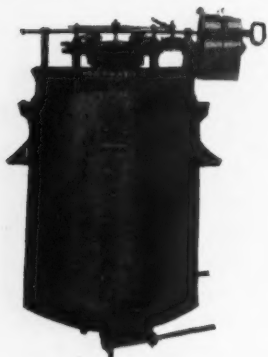
cannot owing to the presence of barium iodide, attack the double linkings of the oil molecule. Oils which have become oxidized at fairly high temperature, up to 120 deg., contain a mixture of peroxides easily reducible with hydriodic acid, together with other oxides which are reduced only with difficulty. Oils which have been air blown at 170 deg. contain only the latter type of difficult reducible oxides. The intensity of the Kreis reaction is correlated with the amount of easily reducible peroxides and has no bearing on the other type.—*Jour. Soc. Chem. Ind.*, 50, 24, 550, 1931.

—o—
The removal of substances which are present in vegetable oil and which substances are normally solid at low temperatures is secured as follows: An oil such as cottonseed is mixed with diatomaceous earth and the mixture is chilled to solidify the solid constituents of the oil and is filtered through a precoated filtering medium prepared by flowing into a filter press, at a temperature below the solidification temperature of the solid constituents, a mixture of earth and oil of the kind to be treated, but which has already been substantially freed from the solid constituents, so that a coating of oil-wetted earth is formed on the filtering surfaces.—U. S. Patent No. 1,831,433.

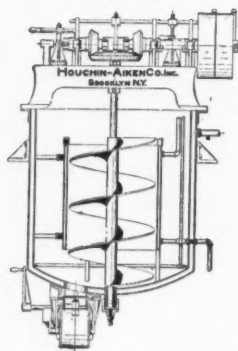
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The Hubl Method has been found to give iodine values agreeing with those obtained by the Wijs Method only if the iodine solution used is acidified so as to correspond to the presence of at least 3% hydriodic acid. Excess acid will not alter the results. Temperatures between 10 deg. and 25 deg. did not alter the agreement between the two methods. The Wijs Method requires only 20 minutes of contact, whereas the Hubl Method requires two hours.—*Ann. Chim. Applicata*, 21, 436, 1931; *Chem. Abstr.*, 26, 863.

—o—
Fine threads of soap, readily soluble in cold water, are formed by adding to a soap mass an alkali salt such as sodium perborate in such quantity that no softening or salting out takes place, and then extruding the material into threads having a diameter of less than 1.5 mm.—U. S. Patent No. 1,828,826.

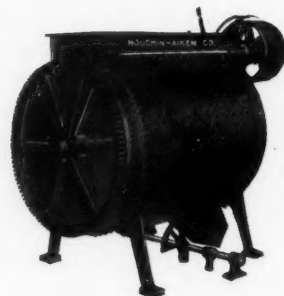
NEW and USED HOUCHIN SOAP MACHINERY



Perfection Crutcher
Sliding Gate Valve



Perfection Crutcher Cross
Section View Plunger
Type Valve



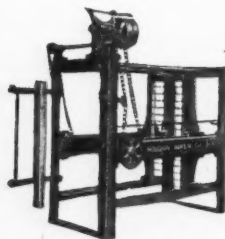
Horizontal Crutcher



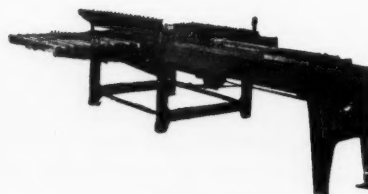
Empire State
Press



Standard
Soap Frame

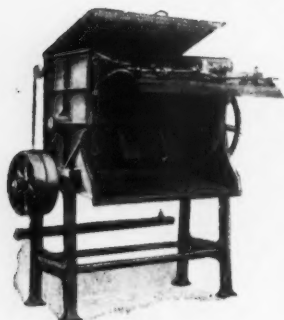


Automatic Power
Slabber

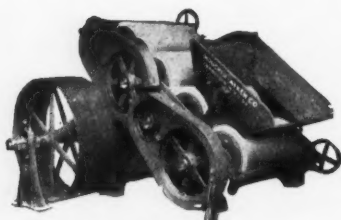


Automatic Power Cutting
Table

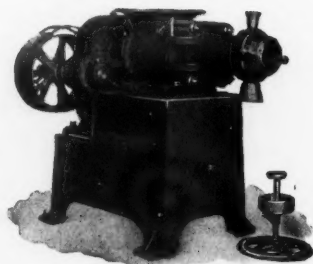
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Mills built with 3 to 12 Chilled
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RECORD OF TRADE-MARKS

The following trade-marks were published in the February issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Marks Filed

Scram—This in solid letters describing liquid washing compound. Filed by Romar Products Co., Springfield, Mass., Oct. 5, 1931. Claims use since July, 1931.

Tubex—This in solid letters describing antiseptic. Filed by Tubex Co., New York, Dec. 8, 1931. Claims use since May 12, 1931.

Loret—This in solid letters describing soaps. Filed by Loret Laboratories, Chicago, Sept. 12, 1931. Claims use since Mar. 19, 1921.

Merton's—This in solid letters on package label describing silver polish. Filed by R. M. Nevins Co., Peoria, Ill., Dec. 7, 1931. Claims use since Nov. 16, 1931.

Isle-O-Pine—This in outline letters against oval-shaped background describing soap. Filed by H. Kohnstamm & Co., New York, Dec. 9, 1931. Claims use since Nov. 20, 1931.

Ideal—This in solid letters describing antiseptic. Filed by Barnard Co., Washington, D. C., Nov. 21, 1931. Claims use since June 20, 1931.

Cattleze—This in broken letters with picture of a cow describing fly spray for cattle. Filed by Calumet Refining Co., Chicago, Dec. 8, 1931. Claims use since Oct. 23, 1931.

Aunt Kate's—This in solid letters describing soap. Filed by Aunt Kate's Products Co., Saugerties, N. Y., Nov. 24, 1931. Claims use since July 30, 1931.

Geometrical design—Describing soap. Filed by W. F. Young, Inc., Springfield, Mass., Nov. 28, 1931. Claims use since July 1, 1931.

O-B—This in solid letters on package label describing soap. Filed by O. B. Soap Co., Buffalo, Dec. 24, 1931. Claims use since Oct., 1931.

Orox—This in shaded letters describing dentifrice. Filed by Orox Products Co., New York, Oct. 31, 1931. Claims use since Aug. 21, 1931.

Pepsodent—This in outline letters describing dentifrice. Filed by Pepsodent Co., Chicago, Dec. 14, 1931. Claims use since May 6, 1915.

Tolamin—This in solid letters describing antiseptic. Filed by Rare Chemicals, Inc., Nepera Park, N. Y., Dec. 19, 1931. Claims use since June 13, 1931.

Primos—This in outline letters describing cleansing preparation. Filed by Southern Mineral Products Corp., New York, Aug. 19, 1931. Claims use since June, 1931.

Epicream—This in solid letters describing shaving creams. Filed by Chas. D. Thompson, Lawrence, Mass., Oct. 1, 1931. Claims use since Feb., 1931.

Big-Boy—This in solid letters on cake of soap describing soap. Filed by John T. Stanley Co., New York, Dec. 8, 1931. Claims use since Jan. 2, 1930.

Toil-Gien—This in solid letters describing cleansing preparation. Filed by Toil-Gien Products Co., St. Louis, Jan. 11, 1932. Claims use since July, 1927.

Geometrical design—for package label, describing insecticides. Filed by Standard Oil Co., Whiting, Ind., Oct. 21, 1931. Claims use since May 12, 1926.

Rx-ite—This in solid letters describing antiseptic. Filed by Rxite Co., Los Angeles, Nov. 30, 1931. Claims use since July 17, 1931.

Acteen—This in outline letters describing insecticide. Filed by Acteen Chemical Service Co., Berkeley, Cal., Dec. 22, 1931. Claims use since Nov. 3, 1931.

Cubor—This in solid letters with drawing of cube describing insecticide. Filed by Chipman Chemical Engineering Co., Bound Brook, N. J., Dec. 23, 1931. Claims use since Dec. 14, 1931.

Trade Marks Granted

291,107. Liquid Surgical Soap. Hillyard Chemical Co., St. Joseph, Mo. Filed October 12, 1931. Serial No. 319,989. Published November 17, 1931. Class 4.

291,123. Soaps. Pure Oil Co., Chicago. Filed July 27, 1931. Serial No. 317,372. Published November 17, 1931. Class 4.

291,141. Paste Cleaner. Davies-Young Soap Co., Dayton. Filed September 29, 1931. Serial No. 319,523. Published November 10, 1931. Class 4.

291,164. Cleaning, Cleansing, and Detergent Materials. J. B. Ford Co., Wyandotte, Mich. Filed August 24, 1931. Serial No. 318,355. Published November 24, 1931. Class 4.

291,165. Jelly Soap. Cleanzine Mfg. Co., Brooklyn. Filed August 28, 1931. Serial No. 318,611. Published November 24, 1931. Class 4.

291,213. Soap Powders. Milwaukee Chemical Co., Milwaukee. Filed October 16, 1931. Serial No. 320,127. Published November 24, 1931. Class 4.

291,214. Soap Powder. Milwaukee Chemical Co., Milwaukee. Filed October 16, 1931. Serial No. 320,128. Published November 24, 1931. Class 4.

291,215. Washing and Scouring Agent. General Dyestuff Corp., New York. Filed October 19, 1931. Serial No. 320,192. Published November 24, 1931. Class 4.

291,216. Shoe Polish. Evangeline Co., Brooklyn. Filed September 28, 1931. Serial No. 319,512. Published November 24, 1931. Class 4.

291,217. Laundry Soaps, Toilet Soaps, Shaving Soaps, Shredded Soaps, Soap Jelly, Soap Powders, Soap Flakes, Metal Polishes, Silver Polishes, Shoe Polishes, and Stove Polishes. Vadsco Sales Corp., New York. Filed October 2, 1931. Serial No. 319,676. Published November 24, 1931. Class 4.

291,219. Polish. California Silver Cotton Co., Berkeley, Calif. Filed September 18, 1931. Serial No. 319,189. Published November 24, 1931. Class 4.

291,247. Soap. Mallen Soap Powder Co., Kansas City. Filed February 12, 1931. Serial No. 310,967. Published November 24, 1931. Class 4.

291,308. Dental Cream, and Antiseptic. Ty-Ton Co., Erie, Pa. Filed September 19, 1931. Serial No. 319,226. Published November 10, 1931. Class 6.

291,400. Liquid Insecticide. Midway Chemical Co., Chicago. Filed August 17, 1931. Serial No. 318,067. Published November 10, 1931. Class 6.

291,401. Antiseptics, Disinfectants, etc. Heyden Chemical Corp., New York. Filed August 24, 1931. Serial No. 318,359. Published November 10, 1931. Class 6.

291,411. Insecticides. S. F. Moulton, Los Angeles. Filed September 23, 1931. Serial No. 319,333. Published November 10, 1931. Class 6.

291,419. Antiseptics. Pepsodent Co., Chicago,

Filed December 23, 1930. Serial No. 309,285. Published November 24, 1931. Class 6.

291,446. Cleansing Powders. Sleet Products Co., Chicago. Filed September 14, 1931. Serial No. 319,042. Published November 24, 1931. Class 6.

291,447. Tooth Powder. Foret Lab., Raceland, La. Filed September 15, 1931. Serial No. 319,063. Published November 24, 1931. Class 6.

291,456. Shampoo Powder. Colgate-Palmolive-Peet Co., Chicago. Filed October 1, 1931. Serial No. 319,610. Published November 24, 1931. Class 6.

291,464. Liquid Baby Soap. Hillyard Chemical Co., St. Joseph, Mo. Filed October 12, 1931. Serial No. 319,990. Published November 24, 1931. Class 4.

291,482. Polishing and Cleansing Compounds, Kelwax Corp., Philadelphia. Filed September 15, 1931. Serial No. 319,098. Published November 24, 1931. Class 16.

291,496. Floor Wax. Bradley Lumber Co., Arkansas, Warren, Ark. Filed September 27, 1930. Serial No. 306,126. Published November 24, 1931. Class 16.

291,833. Antiseptic Preparations in Powder Form. Russell See, Rahway, N. J. Filed October 23, 1931. Serial No. 320,372. Published December 1, 1931. Class 6.

291,834. Pine Needle Disinfectant, Pine Needle Shampoo. Fichtolin Manufacturing Co., New Rochelle, N. Y. Filed October 23, 1931. Serial No. 320,359. Published December 1, 1931. Class 6.

291,862. Dentifrice. Citradent Co., Indianapolis. Filed September 28, 1931. Serial No. 319,499. Published November 24, 1931. Class 6.

291,865. Ant Poison. Antrol Lab., Inc., Los Angeles. Filed September 23, 1931. Serial No. 319,303. Published December 8, 1931. Class 6.

291,920. Antiseptic, Disinfectant and Germicidal Preparations. Hynson, Westcott & Dunning, Inc., Baltimore. Filed July 25, 1931. Serial No. 317,315. Published November 24, 1931. Class 6.

291,939. Antiseptics. American Pharmaceutical Co., New York. Filed October 17, 1931. Serial No. 320,150. Published December 1, 1931. Class 6.

291,944. Insecticides. John Cowan Co., Bowie, Md. Filed October 23, 1931. Serial No. 320,355. Published December 1, 1931. Class 6.

291,948. Insecticides, Germicides, and Fungicides. California Spray-Chemical Corp., Berkeley, Calif. Filed October 28, 1931. Serial No. 320,542. Published December 15, 1931. Class 6.

Laundry Soap

(Continued from Page 23)

quality cakes at very low prices for their annual January and February soap sales. During the past six weeks, a tremendous quantity—greater than in former years—of excellently perfumed and colored milled toilet soap has been disposed of in the metropolitan area at a price of about four cents per four-ounce cake. It is interesting to note that more and more of the national brands are finding their way to the counters of the chain stores, one case in particular being the sale on the five cent counter of a toilet brand which was advertised widely a short time ago and originally priced to retail at two for twenty-five cents.

How successful soap manufacturers will be with their plan of meeting present conditions with low-priced "fighting" brands is a question for the future. Their plan may be to protect market prices of their national brands without losing out on present sales which of necessity must be made at low prices. With a return to conditions more nearly approaching normalcy, they may withdraw from this bulk market and concentrate once more on their trade-marked brands which have weathered the storm without substantial cuts. The danger lies in accustoming the consuming market to ridiculously low prices which it will protest against giving up when raw material markets once more advance.

Patterson Foundry & Machine Co., East Liverpool, Ohio, manufacturers of kettles, crutchers, grinders, evaporators and other heavy equipment for the soap and sanitary products industries, announces the development of a new portable mixer. The new mixer which will be marketed under the name of "Typhoon" is available in eight standard models from laboratory size equipment to a machine capable of mixing 7,500 gallons. The "Typhoon" is equipped with non-corrosive fittings and two triple-blade propeller stirrers and has ball bearing equipment throughout. The company has issued a leaflet describing the "Typhoon" and will send this to interested firms on request.

A. J. Dedrick has joined the staff of Albert Verley, Inc., as a representative in the mid-western territory. He will make his headquarters in Chicago, visiting the surrounding territory. Mr. Dedrick has been connected in the past with William Waltke Co., Armand Co. and Edward T. Beiser Co.

New Patents

Conducted by
Lancaster, Allwine & Rommel

Registered Attorneys
PATENT AND TRADE-MARK CAUSES

815 15th St., N. W., Washington, D. C.

Complete copies of any patents or trade-mark registrations reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-mark Law will also be freely answered by these attorneys.

No. 1,840,452, Cleaning and Disinfecting Compound, Patented January 12, 1932, by William E. Jones, Milwaukee, Wis., assignor to Eagle Chemical Company, Milwaukee, Wis., a Corporation of Wisconsin. A cleaning and disinfecting substance substantially inert at atmospheric dryness and effective when mixed with water, and consisting of a dry mixture of common salt (48½ parts), bisulphate of soda (48½ parts), an oxidizing agent (1 part) and a substance tending to prevent lumping or consolidation (2 parts) prior to the mixture of the compound with water.

No. 1,842,443, Process for the Manufacture of Insecticides and Method of Making Same, Patented January 26, 1932, by Roscoe H. Carter, Washington, D. C. The process of making insecticidal preparations containing water, insoluble double fluorides of the alkali metals with aluminum which comprises treating a water insoluble compound of aluminum with alkali metal compounds, in suspension in the presence of water and gaseous hydrofluoric acid, or its aqueous solution wherein is precipitated the water insoluble double fluoride, drying the gel and comminuting.

No. 1,842,993, Insecticide, Patented January 26, 1932, by Karl Marx and Hans Wesche, Dessau in Anheim, Germany, assignors to Winthrop Chemical Company, Inc., New York, a Corporation of New York. An insecticide containing as an active constituent an aliphatic ether of an ar-tetrahydro naphthol.

The import duty on soap and a number of other commodities imported into Egypt from Russia has been doubled, according to information reaching the Commerce Department from Cairo. The increase was authorized under a law of 1930 which permitted the levying of a surtax equal to the import duty on goods imported from or through countries not having concluded customs agreements with Egypt.

Every month soap manufacturers all over the world ship out millions of cakes of Munn-made soap at a lower cost and a greater profit. Ask any one of these manufacturers what is the reason for Munn's great superiority and the answer will be, "Munn is absolutely clean and Uniform. You can depend on it, every time."



GENERAL NAVAL STORES COMPANY, Inc.

Address Our Main Office: 75 East 45th St., New York City



Plants: De Quincy, La.—Pensacola, Fla.—Bay Minette, Ala.

Say you saw it in SOAP!

CONTRACTS AWARDED

Van Camp Packing Co., Washington, has been awarded the following contracts to furnish laundry soap as follows, in a recent Chicago quartermaster's bidding: 720 lbs., Erie, 2.9c; 720 lbs., Paterson Field, 2.8c; 6,600 lbs., Fort Hayes, 2.9c; 21,000 lbs., Fort Benjamin Harrison, 2.78c; 7,800 lbs., Selfridge Field, 2.9c; 3,600 lbs., Camp Custer, 2.9c; 8,400 lbs., Chanute Field, 2.9c; 1,620 lbs., Rock Island, 2.9c; 120 lbs., Grand Rapids, 2.9c; and 6,000 lbs., Fort Sheridan, 2.9c. Procter & Gamble Distributing Co., Chicago, was awarded 3,000 lbs. for Fort Brady at 2.96c and another 4,800 lbs. at the same figure. Armour & Co., Chicago, was awarded 4,500 lbs. for the Chicago depot at 2.72c. Windsor Soap Co., Washington, was awarded the following quantities of toilet soap for delivery as indicated: 1,400 cakes for Chanute Field, 2c and 5,300 cakes, For Sheridan, 2c; Swift & Co., Chicago, awarded 1,440 cans scouring powder at 2.12c.

In a recent Washington treasury supply division bidding the following quotations were made on one barrel of olive oil soap: J. Eavenson & Son, 5c lb.; Colgate-Palmolive-Peet Co., 5.5c; Armour & Co., 5.5c; Unity Sanitary Supply Co., 9c; Crystal Soap and Chemical Co., \$29.80 bbl.; City Chemical Co., \$30; Batavia Mills, Inc., \$42; Sterling Supply Corp., \$42.50; Silig Co., \$42.50.

The following were low bidders on various materials as specified: H. Kohnstamm & Co., 500 lbs. powdered soap, \$27.50, and 2,500 lbs. at \$150; Eaton-Clark Co., 1,200 lbs. laundry compound, \$38.40.

Swift & Co., San Francisco, was awarded a quantity of powdered soap for Fort Mason quartermaster in a recent bidding, at a price of 3.2c. Newell-Gutrad Co., San Francisco, was awarded the contract for a quantity of type A scouring soap at 6.5c and quantity of type B scouring soap at 2.2c.

Jas. Good, Inc., Phila., has been awarded the contract for 4,400 lbs. carbon tetrachloride for Wright Field air corps, Dayton, Ohio, at a price of 9.4c per pound.

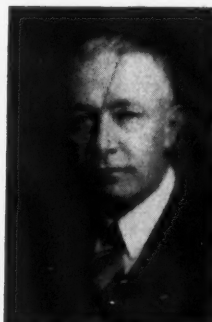
Armour & Co. has been awarded the contract to supply 73,380 bars soap to Brooklyn army quartermaster at a price of 2.885c. Also awarded

14,544 cans scouring powder at 2.5c. Windsor Soap Co. awarded 61,400 lbs. white soap at 2.13c.

A polish for metals containing impalpable tri-poli, oxalic acid, salicylic acid, and water is covered by French Patent No. 797,223.

Gulick Heads National Oil Products

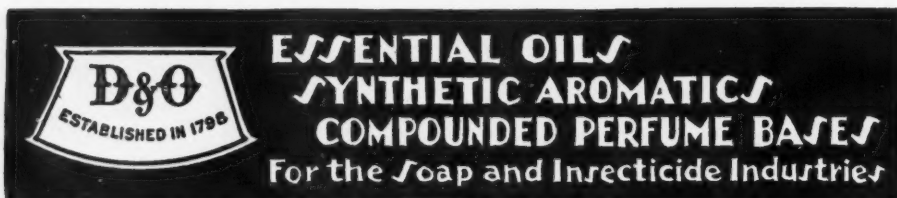
C. P. Gulick, formerly treasurer of National Oil Products Co., Harrison, N. J., was elected president at a directors' meeting held Feb. 16, succeeding M. A. Richards, who was forced to



C. P. GULICK

resign on account of ill health. Other officers elected include J. H. Barton, vice-president; Ralph Wexler, treasurer; Gifford D. Davis, secretary, and A. A. Vetter, assistant secretary-treasurer. These men, along with Messrs. Reade and Coolidge, comprise the board of directors. Coincident with the election of Mr. Gulick as president the company announced a new sales policy

effective May 1, which will replace territorial managers with industry sales managers. Mr. Davis will be general sales manager also in charge of miscellaneous industry sales, including Euthol, the company's new soapless shampoo. C. Irwin Post, who has been directing sales in the middle west and managing the Chicago plant, will have charge of sales of the firm's products for tanneries. O. E. Lohrke, Harrison district manager, will head the division in charge of paint, oil and Metasap Chemical sales. The latter company is a National Oil Products subsidiary, making stearates and metallic soaps. T. A. Printon, at present New England sales manager, will be in charge of the textile division. These four men will have their headquarters at Harrison, but will contact their industries regularly by working with salesmen who will continue to cover their present territories. National Oil Products Co. makes a diversified line of specialty oil and soap products for tanneries, textile mills, paint and varnish manufacturers, printing inks, etc.



We offer the following materials as special suggestions for use in conjunction with Oil Rose Geranium, either to partially replace this oil or to complete the bouquet

GERANIOL
VERT DE GERANIUM
PHENYL ETHYL ALCOHOL
OIL GERANIUM EAST INDIAN
OIL CITRONELLA JAVA
OIL CEDAR WOOD SUPERLATIVE
OIL LEMONGRASS
OIL GUAIAWOOD
OIL NUTMEG
PHENYL ACETIC ACID
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Quality and fullest value for your money.*

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NEW YORK, N. Y.

*"The integrity of the house is reflected in the
quality of its products"*

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Market Report on
ESSENTIAL OILS AND AROMATICS

(As of March 9, 1932)

NEW YORK—The principal feature of the essential oil market this period was a sharp advance in the price of geranium oil on the report of a severe storm on the Island of Reunion. The price of Bourbon oil advanced abruptly in the local market, followed by a sympathetic upward movement in the price of Algerian oil. Local dealers are skeptical of the storm damage reports, remembering how little foundation there was for similar reports about this time last year. Nevertheless they hesitate to make extensive future commitments, pending confirmation of the storm report. Another feature of the market this period was the stable position of anise and cassia oils which have not shown any tendency to advance in spite of the serious turn to Chinese affairs.

OIL ANISE

All through the period of serious Chinese

troubles this past month anise oil prices have been unchanged. There has of course been no real reason for an advance, as Hong Kong, the principal port of departure for anise oil shipments, is far from the troubled area. The failure of Chinese speculative operators to take advantage of the possibilities of the situation is in this case, however, somewhat at variance with their past actions in similar situations.

OIL CASSIA

Much the same situation prevailed on this oil as on anise oil. Prices remained unchanged and the market quiet.

OIL CITRONELLA

Slightly lower prices were reported by late cables this period on Ceylon oil. The market was quiet with no particular pressure on either the buying or selling side.

OIL GERANIUM

Reports from the Island of Reunion state that

Announcement

SHERKA CHEMICAL COMPANY

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are now exclusive importers and distributors of industrial and pharmaceutical chemicals manufactured by Schering-Kahlbaum, A. G., Berlin. This arrangement became effective March 1, 1932. These chemicals have been imported and sold for several years by the

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TERPINEOL, C. P.

One of the best low cost odors for soaps, sprays, deodorants, etc. A pure water white product.

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Useful in shaving creams, soaps, shampoos, lotions, creams, etc. White crystals with fine natural odor.

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LILAC W. S.
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CARNATION W. S.
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FRESIA W. S.
and others

*These oils are clearly soluble in water
You will need only four ounces to one gallon*

Also Special Odors for

Cake Soaps --- Liquid Soaps --- Disinfectants --- Para Products

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WELL dressed in a strikingly decorated NILES Steel Container, your product makes a most favorable "first impression." Where competition is keen, this sturdy steel guardian becomes an eloquent salesman as well.

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Let us assist you in modernizing the appearance and increasing the protection of your products. Sizes and closures are offered to meet every need.

The Niles Steel Products Co.

Manufacturers

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STEEL CONTAINERS

NILES, OHIO

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serious damage has been done to the geranium crop by a typhoon which recently struck the island. The immediate result in the local market was a sharp advance in the price of Bourbon oil, followed by a subsequent advance in the price of Algerian oil. There is a tendency in some quarters to discount the seriousness of the crop damage reports, as the Reunion typhoon story has turned out to be greatly overemphasized many times in the past. Nevertheless prices are for the present held at substantial advances, awaiting furthermore definite information from Reunion.

Imports of castile soap into United States during December, 1931, totaled 269,414 pounds, worth \$24,732, as against 220,493 pounds, valued at \$20,507, during December, 1930. Total imports in the year 1931 were 2,753,759 pounds valued at \$254,378, as against 3,664,081 pounds, worth \$346,522, in 1930.

A new filling machine being marketed by F. J. Stokes Machine Co., Philadelphia, is said by them to have solved the problems of quick cleaning and quick change of container. According to the makers only ten minutes are required for change

of material and but two minutes for change of container. The machine fills liquids into cans, jars or tubes from one-quarter pint up to five gallons. A folder describing the machine in detail is available upon request.

Sefton National Fibre Can Co., St. Louis, announces that a new branch factory is being installed at 6551 W. 65th St., Chicago, in the clearing industrial district. Spirally wound cans with fibre ends or metal ends will be made immediately at their new branch plant and as rapidly as conditions permit, additional machinery will be installed until a full and complete operating unit is available. Actual operations started early this month. The new branch office is under the personal supervision of Charles T. Simpson, formerly vice-president and general manager of the W. T. Ritchie Co., Chicago, who recently organized Simpson, Inc. to manufacture fancy setup boxes. The Simpson plant is at the same location.

A new concern which will manufacture soaps and household cleaners is Lighthouse Manufacturers, 907 Sixth Avenue, Des Moines, Iowa. Charles Kegley is the manager of the new concern.

Pine Oil

Perfuming Compound

Soluble in Water

*also many others of different
character including compounds for*

TOILET and LAUNDRY SOAPS

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New York
427 Washington St.

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COLUMBIA BRAND

98% - 100%
CAUSTIC SODA

76% Na_2O

Solid — Flake
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99% - 100%
SODA ASH

58% Na_2O

Light — Dense
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THE COLUMBIA ALKALI CORPORATION

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Plant at BARBERTON, OHIO

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Market Report on
SOAP AND DISINFECTANT CHEMICALS

(As of March 8, 1932)

NEW YORK—A slightly firmer tone was noted in the market for soap and disinfectant chemicals this period. Sales and shipments for the second month of the year compared favorably with totals for the first month, giving hope that the slow movement back to a higher level of activity has already begun. Alkali producers report increased shipments over the past five weeks, although the spot market remains quiet. The glycerine situation remained unchanged, with buyers inactive and sellers unwilling to push matters. Slightly higher prices have been current on rosin. Another increase in shipments and a decrease in stocks was reported for the period just closed.

ALKALIS

Increased shipments of alkalis are reported by producers for the past five weeks. Manufacturers believe this increase in demand to be the result of stock replenishment. The spot market

was not affected, the situation remaining quiet with prices unchanged.

GLYCERINE

No quotable changes were reported in the glycerine market this period. The demand from the anti-freeze trade has been unusually small this year due to the open winter. In the face of this light demand sellers have been forced to refrain from taking active position due to their desire to avoid price reductions. The present market for saponification glycerine is $5\frac{1}{2}$ to $5\frac{3}{4}$ c. lb., with soaps lye at $4\frac{5}{8}$ to $4\frac{3}{4}$ c. lb.

NAVAL STORES

A continuance of fairly good rosin shipments from southern points has resulted this month in another reduction in spot stocks. In this between-season period, arrivals have of course been small. A slightly higher scale of prices is now current, the advance coming in consequence of the somewhat better statistical position of the

for your soap products—

STAUFFER BRAND

Caustic Soda

"STAUFFER BRAND" Caustic Soda can be supplied either solid or liquid, in drums or tank cars. It is uniform, pure and worth while using in your soap products. Send your next Caustic Soda inquiry to us.

also makers of Carbon Tetrachloride for cleaners

STAUFFER CHEMICAL COMPANY

Plants

Niagara Fall, N. Y.
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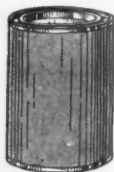
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Numerous styles, colors, and sizes.
Tin or paper ends.

CIN-MADE Fibre Cans of highest quality are the ideal container for scouring powders, cleansers, soap powders, insecticides, para and naphthalene blocks and crystals, etc. Special and stock sizes and styles. Also moth block holders, mailing tubes, etc.

Let us discuss the container for that new product with you,—or tell you about revamping and modernizing your old packages.

A complete fibre container service.
Samples gladly sent.

The CINCINNATI MAILING DEVICE CO.
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Fibre can specialists since 1902



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The UNIVERSAL and PLUG TYPE SOLUTIONIZERS

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These machines have
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Thoroughly dissolved potash soap solutions of any desired richness, **INSTANTLY** available by simply turning on the water supply valve.

Potash soaps may now be used at competitive costs of less desirable cleansing agents.

A Type for any Potash soap not a liquid.
A model for any standard container.

No Moving Parts, Nothing to Wear, Rust Proof. A minute to install, a life time of service. Priced far below your expectations.

Write today for details and prices to Manufacturers and Jobbers.

The SOLUTIONIZER COMPANY
1449 W. 69th Street Chicago, Ill.

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market. The closing schedule this period was as follows: Gum Rosin, Grade b, \$3.50; H, \$4.25; K, \$4.50; N, \$5.80; WG, \$6.25; W.W, \$6.45; Wood Rosin, \$3.80 to \$4.00.

PYRETHRUM

Pyrethrum quotations have been advanced over the past few weeks by Japanese dealers even faster than the rate of exchange has dropped. While there is of course a possibility of interference with future supplies, the general belief among local suppliers is that developments up to now do not justify the advances which have been made. Current quotations in the New York market range from 20c. to 22c. lb.

Exports of toilet or fancy soap from United States during December, 1931, amounted to 556,857 lbs., worth \$77,261, as against 542,808 lbs., priced at \$97,897, during December, 1930. Exports over the entire year 1931 were 5,062,015 lbs., worth \$1,020,325, as compared with 5,442,681 lbs., worth \$1,234,730, in 1930.

The Mathieson Alkali Works, Inc., today reported net income of \$1,394,107 after charges and taxes for the year ended December 31, a decline of \$701,900 from the \$2,096,007 total registered in the preceding twelve months.

New Books

Vegetable Fats and Oils by George S. Jamieson, 444 pages. An American Chemical Society Monograph. Published by Chemical Catalog Co. Covering classification, occurrence, properties, analytical methods, etc., of vegetable oils, fatty acid and other derivatives; also production and refining methods. Contains much data on little-known oils and profuse references to current literature. The author is chemist in charge of Oil, Fat and Wax Laboratory, U. S. Bureau of Chemistry and Soils. The name of the author leaves the new volume without need of any further recommendation.

Allen's Commercial Organic Analysis, by Mitchell. 5th edition, Vol. IX. 6½ x 9½, 617 pages, 25 illustrations. This latest edition of the ninth volume of this standard source book represents a considerable improvement and enlargement over previous editions.

Volume II of the 1931 *Commerce Yearbook*, issued by the U. S. Bureau of Foreign and Domestic Commerce, is now available. Priced at \$1.00, it contains over 700 pages of maps, charts, tables and the latest statistics on industry and trade in 75 foreign countries. Economic surveys of individual markets are included.



Caustic Soda
High Grade—Solid or Liquid Form

Carbon Tetrachloride
Redistilled—water white—supplied also in combination with other solvents to meet individual requirements

Tri-Sodium Phosphate
Fine granular and powdered. Free-flowing and non-caking

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**for your Dry Cleaning Soaps, Shaving Soaps,
Special Cleaners, Liquid Soaps, Polishes, etc.**



STEARIC ACID

Distilled

Saponified

RED OIL

*Elaine Brands
Distilled Saponified*

FATTY ACIDS

EMERY INDUSTRIES, Inc., Cincinnati, Ohio

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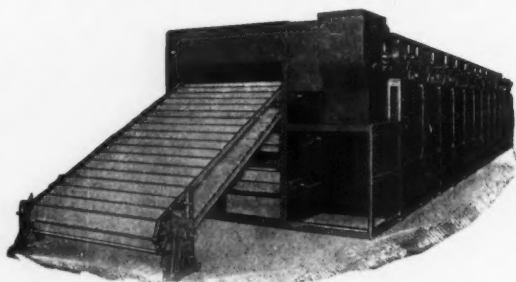
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Stocks Carried in All Principal Cities

The Sargent Three Swing Shelf Conveyor progressive stage

CHIP SOAP DRYING MACHINE



A MACHINE which is a factor of economy and a dependable actor in several soap plants. A machine of slight depreciation and large production. It is liked by attendants

as well as by the president of the company. Won't you investigate our offering on your next Chilling Roll and Soap Dryer?

C. G. SARGENT'S SONS CORP.

GRANITEVILLE

MASSACHUSETTS

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Market Report on TALLOW, GREASES AND OILS

(As of March 9, 1932)

NEW YORK—A distinctly firmer tone was apparent in the market for soap making oils, fats and greases during the period just closed, with a whole series of fractional advances noted on various items in the list. Copra was the most active participant in the advance, moving up sharply earlier in the period, and later losing some of the earlier gains. This movement was duplicated by coconut oil. The upward trend in coconut oil locally came as a sympathetic movement following a sharp flurry in the Straits copra market. Few sales were reported at the higher levels, and late in the period quotations eased off again. Other items which shared in the upward movement were corn oil, lard, tallow and chinawood oil.

COCONUT OIL

Coconut oil quotations advanced a quarter of a

cent a pound this period, following a comparable advance in the price of copra. The sharp upward movement was first felt in the Straits copra market where sellers attracted considerable attention by offering to cancel contracts made at what are now fairly high prices. The effect of this offer was immediately felt in the local market and on the coast, with copra advancing to $3\frac{3}{8}$ c. lb., and New York tanks of Manila oil rising to 4c. lb. Buyers resisted the advance, showing little interest in the higher quotations. Latterly the market has eased off somewhat, as few sales have been reported at the higher level.

CORN OIL

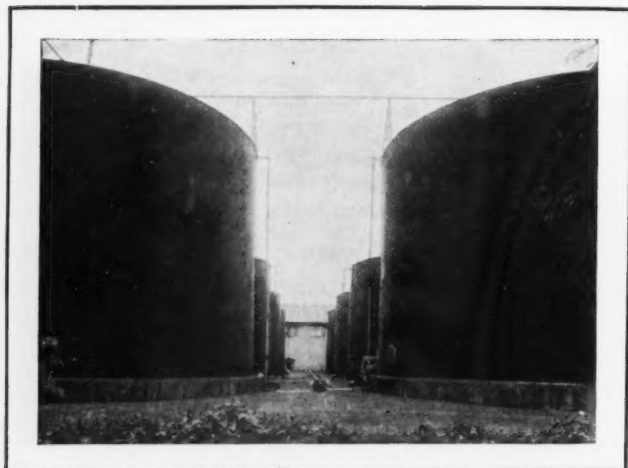
Light offerings and a somewhat better inquiry served to advance the price of corn oil this period, the closing quotation being $3\frac{5}{8}$ c. lb. for mill tanks, an advance of a quarter of a cent. As



SWANN T.S.P.
CRYSTALLINE OR GLOBE

**FREE FLOWING
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UNIFORM**

SWANN CHEMICAL CO.
BIRMINGHAM NEW YORK
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Kellogg Coconut Oil
Storage Tanks in the
Philippines

Select *the BEST!* **MANILA CRUDE**

IN the production of Manila Crude some crushers try to meet the industry's standards, others strive to surpass them. You'll find Spencer Kellogg and Sons in the latter group.

Why should KELLOGG'S excel in quality? Here's the reason: *Careful, complete control of every phase of manufacture and distribution*—from the time the best copra is selected until delivery of the oil to the customer.

In buying Manila Crude or any high grade special coconut oil it will pay you to get the the **KELLOGG BRAND**.



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Kellogg's Coconut Oils

MANILA (Crude) - CRYSTALITE - SILVER SEAL COCHIN - KOLINE (Edible) - HYDROGENATED

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in the case of coconut oil the market exhibited a somewhat easier tone later in the period.

OLIVE OIL

The olive oil market continued to exhibit a firm outlook this period, with buyers awaiting further developments in the Spanish situation before making any extensive purchases at the recent advance. Offers were light and quotations steady at 70c gal. for denatured oil.

TALLOW

The tallow market was firmer this period as a result of light offerings and the generally stronger position of competing products. There were fractional advances in prices, although little business was closed at the higher levels.

Norwegian Whaling Notes

Unsold stocks of whale oil at the present time are reported to total 600,000 barrels, according to Trade Commissioner Carlson, at Oslo, Norway. Tentative plans are already afoot to prepare a limited number of vessels to engage in whaling activities during the coming season, it being realized by Norwegian producers that it might not be sound policy to send out the entire fleet. However, an agreement between the different companies will take considerable time to consummate, and a definite decision will not become known until later.

An official Norwegian government estimate of the whale oil production of the summer season 1931 was 60,000 to 70,000 barrels, of which 37,000 to 38,000 barrels were produced in the South African field, the balance being from the Arctic field. The figures cited do not include Pacific Coast operations.

The small fleet of vessels operating in the Antarctic at the present time was reported by Oslo, under date of January 28, to have produced around one million barrels, which figure taken in conjunction with unsold stocks remaining from the previous season, has made it appear to the Norwegian Whaling Association that perhaps four or five of the largest cookeries will be a sufficient fleet to send out next year.

Stocks of crude cottonseed oil on hand in United States, Jan. 31, 1932, totaled 133,628,955 lbs., as against 127,826,502 lbs. on the same date in 1931. Stocks of refined oil on Jan. 31, 1932, were 555,210,975 lbs., as compared with 463,107,422 lbs. a year previous.

E. I. du Pont de Nemours & Co., Wilmington, paid, March 15, to stockholders of record Feb. 26, the regular quarterly dividend on common stock. On April 25 the \$1.50 dividend on debenture stock of record April 9 will be paid.



**. . So says the
man who over-
sees the batch!**

**Research and factory control
of method brings these precise
effects produced by**

**STANDARD GRADE
SILICATE OF SODA**

**The essential elements are
there..and Clarity—supreme!**

**Graded always, as you may
require. The one that you pre-
fer and specify, will unfaill-
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**"STANDARD" is the NAME
A Safe Standard to Adopt**

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"This is the
water softener
your Mother prefers"

CONSUMERS, even retailers, may not know the "inside" story of their cleaners and water softeners. They probably know nothing about mechanical condition, solubility tests or various ingredients. But, you can't fool them on performance. For quick first sales and frequent re-sales, give them cleaners formulated with Aero Brand T-S-P so that free-flowing and quick solubility will carry through to the moment of consumer use.

The reason Aero Brand T-S-P meets all mechanical requirements is because it is cured and screened with exceptional care. Our improved equipment and enlarged storage gives us facilities for supplying the finest quality in quantities and deliveries as needed. Let us send you samples and quote you on rail, water or truck delivery from Warners, New Jersey, on New York Harbor.



Industrial Chemicals Division

American Cyanamid Company

535 Fifth Avenue New York

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T
S
P

CURRENT PRICE QUOTATIONS

As of March 9, 1932

Chemicals

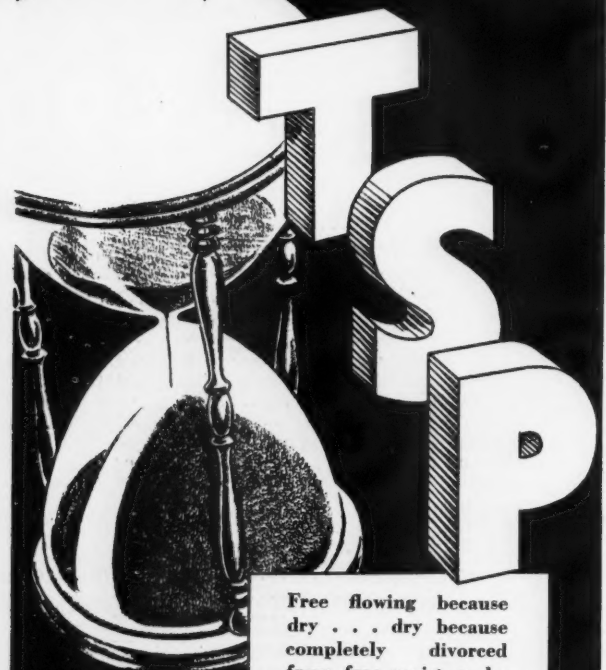
Acetone, C. P., drums.....lb.	.10	.11
Acid, Boric, bbls., 99½%.....ton	135.00	162.50
Cresylic, 97% dk., drums.....gal.	.47	.48
97-99%, pale, drums.....gal.	.54	.58
Formic, 90%, tech.....lb.	.10½	.12
Oxalic, bbls.....lb.	.11	.11¼
Adeps Lanae, hydrous, bbls.....lb.	.14	.15
Anhydrous, bbls.....lb.	.15	.16
Alcohol, Ethyl, U. S. P., bbls.....gal.	2.45	2.59
Complete Denat., No. 5, drums, ex. gal.	.35½	.43½
Alum. potash lump.....lb.	.03	.03¼
Ammonia Water, 26°, drums, wks..lb.	.02½	.02¾
Ammonium Carbonate, tech., bbls..lb.	.10½	.11½
Bleaching Powder, drums .....100 lb.	1.75	2.35
Borax, pd., cryst., bbls., kegs.....ton	66.00	77.50
Carbon Tetrachloride, car lots.....lb.	—	.06½
L. C. L.....lb.	.06½	.07
Caustic, see Soda Caustic, Potash Caustic		
China Clay, filler.....ton	10.00	25.00
Cresol, U. S. P., drums .....lb.	.10½	.11
Cresote Oil tanks .....gal.	.11½	.12½
Formaldehyde, bbls. ....lb.	.06	.07
Fullers Earth.....ton	15.00	24.00
Glycerine, C. P., drums .....lb.	.11¼	.11¾
Dynamite, drums .....lb.	.09	.10
Saponification, tanks .....lb.	.05½	.05¾
Soaps, Lye, tanks .....lb.	.04¾	.04¾
Hexalin, drums .....lb.	—	.40
Kieselguhr, bags .....ton	—	35.00
Lanolin, see Adeps Lanae.		
Lime, live, bbls.....per bbl.	1.70	2.20
Mercury Bichloride, kegs .....lb.	.93	1.08
Naphthalene, ref. flakes, bbls.....lb.	.03¾	.05
Nitrobenzene (Myrbane) drums.....lb.	.09½	.11
Paradichlorobenzene, bbls., kegs.....lb.	.15	.23
Paraformaldehyde, kegs .....lb.	.38	.39
Petrolatum, bbls. (as to color).....lb.	.02	.08
Phenol, (Carbolic Acid), drums.....lb.	.14¼	.16
Pine Oil, bbls. ....gal.	.61	.66
Potash, Caustic, drums.....lb.	.06¾	.06¾
Flake .....lb.	.07	.08
Potassium Bichromate, casks .....lb.	.08¼	.08½
Pumice Stone, powd.....100 lb.	2.50	4.00
Rosins (600 lb. bbls. gross for net)—		
Grade B to H, basis 280 lbs. ....bbl.	3.50	4.25
Grade K to N .....bbl.	4.50	5.80
Grade WG and WW .....bbl.	6.25	6.45
Wood .....bbls.	3.80	4.00
Rotten Stone, pwd. bbls.....lb.	.02½	.04½
Silica, Ref., floated.....ton	18.00	22.00
Soap, Mottled 40 lb. box.....lb.	—	.12
Olive Castile, bars, powder.....lb.	.12	.22
Powdered White, U. S. P.....lb.	.14	.16
Green, U. S. P.....lb.	.06½	.07½
Tallow Chips .....lb.	.07½	.08
Whale Oil, bbls.....lb.	.04	.04½
Soda Ash, contract, wks., bags, bbls.		
100 lb.	\$1.12½	\$1.38
Car lots .....lb.	—	1.00
Soda Caustic, Cont., wks., sld..100 lb.	—	2.50
Flake .....lb.	—	2.90
Liquid, tanks .....lb.	—	2.15
Soda Sal., bbls.....100 lb.	1.05	1.15
Sodium Chloride (Salt).....ton	11.40	14.00
Sodium Fluoride, bbls.....lb.	.07½	.08½

Sodium Hydrosulphite, bbls.....lb.	.22	.26
Sodium Silicate, 40 deg., drum, 100 lb.	.75	.80
Drums, 60 deg. wks.....100 lb.	—	1.65
In tanks, 15c. less per hundred, wks.		
Tar Acid Oils, 15-25%.....gal.	.24	.28
Trisodium phosphate, bbls. ....lb.	.03	.03½
Zinc Oxide, lead free.....lb.	.06½	.07
Zinc Stearate, bbls.....lb.	.18	.21

Oils—Fats—Greases

Castor, No. 1, bbls.....lb.	.10¾	.11
No. 3, bbls.....lb.	.10¾	.10¾
Coconut, tanks, N. Y. ....lb.	.03¾	.04
Tanks, Pacific Coast .....lb.	.03½	.03¾
Tanks, Chicago .....lb.	.04¼	.04¼
Cod, Newfoundland, bbls. ....gal.	.25	.26
Copra, bulk, Coast .....lb.	.02¼	.02¾
Corn, tanks, mills .....lb.	.03½	.03¾
Bbls., N. Y. ....lb.	.05	.05¼
Cottonseed, crude, tanks, mill .....lb.	.03¾	.03¾
PSY .....lb.	.04¼	.04¾
Degras, Amer., bbls.....lb.	.03¼	.04
English, bbls. ....lb.	.04¼	.04½
German, bbls. ....lb.	.03½	.03¾
Neutral, bbls. ....lb.	.06¾	.08½
Greases, choice white, bbls., N. Y..lb.	.03¼	.04
Yellow .....lb.	.02¼	.02½
House .....lb.	.02¼	.02½
Lard, prime, steam, tierces .....lb.	.04¾	.05
Compound tierces .....lb.	.06	.06¼
Lard Oil,		
Extra, bbls. ....lb.	—	.07½
Extra, No. 1, bbls. ....lb.	—	.07¼
No. 2, bbls. ....lb.	—	.06¾
Linseed, raw, bbls., spot .....lb.	.0670	.0710
Tanks, raw .....lb.	—	.0610
Boiled, 5 bbls. lots .....lb.	—	.0790
Menhaden, Crude, tanks, Balt. ....gal.	—	.17½
Oleo Oil, No. 1, bbls., N. Y. ....lb.	—	.06¾
No. 2, bbls., N. Y. ....lb.	—	.05¾
Olive, denatured, bbls., N. Y. ....gal.	.70	Nom.
Foots, bbls. N. Y. ....lb.	.05	.05¼
Palm, Lagos, casks, spot .....lb.	.03¾	.04
Shipments .....lb.	.03¾	.03½
Niger casks, spot .....lb.	.03¼	.03¾
Shipments .....lb.	—	.03¾
Palm Kernel, casks, denatured ....lb.	.05¼	.05½
Tank cars, denatured .....lb.	—	.04¾
Peanut, domestic tanks .....lb.	.03¾	.04¼
Red Oil, distilled, bbls. ....lb.	.06¾	.07½
Saponified, bbls. ....lb.	.06¾	.07½
Tanks .....lb.	—	.05¾
Soya Bean, domestic tanks, N. Y..lb.	.03½	.03¾
Stearic Acid		
Double pressed .....lb.	.07½	.08
Triple pressed, bgs. ....lb.	.10¼	.10¾
Stearine, oleo, bbls. ....lb.	.03¾	.04
Tallow, special, f. o. b. plant .....lb.	.02¾	.02¾
City, ex. loose, f. o. b. plant .....lb.	.02¾	.03
Tallow, oils, acidless, tanks, N. Y. ....lb.	—	.06¼
Bbls., c/1, N. Y. ....lb.	—	.06¾
Whale, nat. winter, bbls., N. Y.gal.	.53	.55
Blchd., winter, bbls., N. Y.gal.	.56	.58
Extra blchd., bbls., N. Y.gal.	.59	.61

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BENZYL ALCOHOL
BENZYL CHLORIDE
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As of March 9, 1932

Essential Oils

Almond, Bitter, U. S. P.	lb.	\$2.25	\$2.50
Bitter, F. F. P. A.	lb.	2.50	2.75
Sweet, cans	lb.	.40	.43
Apricot, Kernel, cans	lb.	.26	.28
Anise, cans	lb.	—	—
U. S. P., cans	lb.	.38	.40
Bay, tins		1.90	2.00
Bergamot, coppers	lb.	1.85	2.00
Artificial	lb.	1.35	1.50
Birch Tar, rect., bot.	lb.	.45	.50
Crude, tins	lb.	.13	.14
Bois de Rose, Brazilian	lb.	.60	.65
Cayenne	lb.	1.15	1.30
Cade, cans	lb.	.26	.27
Cajuput, native, tins	lb.	.54	.56
Calamus, bot.	lb.	2.75	3.00
Camphor, Sassy, drums	lb.	.21	.23
White, drums	lb.	.16	.18
Cananga, native, tins	lb.	1.75	1.90
Rectified, tins	lb.	2.20	2.30
Caraway Seed	lb.	1.55	1.65
Cassia, Redistilled, U. S. P.	lb.	1.05	1.10
drums	lb.	—	1.00
Cedar Leaf, tins	lb.	.87	1.00
Cedar Wood, light, drums	lb.	.33	.36
Citronella, Java, drums	lb.	.49	.50
Citronella, Ceylon, drums	lb.	.33	.35
Cloves, U. S. P., cans	lb.	1.15	1.20
Eucalyptus, Austl., U. S. P., cans	lb.	.33	.35
Fennel, U. S. P., tins	lb.	1.00	1.10
Geranium, African, cans	lb.	4.40	5.00
Bourbon, tins	lb.	4.50	5.25
Hemlock, tins	lb.	.90	.95
Lavender, U. S. P., tins	lb.	1.85	3.50
Spike, Spanish, cans	lb.	.55	.75
Lemon, Ital., U. S. P.		1.10	1.40
Lemongrass, native, cans	lb.	.44	.45
Linaloe, Mex., cases	lb.	1.80	1.95
Neroli, Artificial	lb.	10.00	20.00
Nutmeg, U. S. P., tins	lb.	1.20	1.30
Orange, Sweet, W. Ind., tins	lb.	1.35	1.50
Italian cop.	lb.	1.60	2.00
Distilled	lb.	.80	.90
Origanum, cans, tech.	lb.	.25	.40
Patchouli	lb.	3.75	5.50
Pennyroyal, dom.	lb.	1.55	1.60
Imported	lb.	1.10	1.15
Peppermint, nat. cases	lb.	1.50	1.70
Redis., U. S. P., cases	lb.	1.65	1.90
Petit Grain, S. A., tins	lb.	1.10	1.20
Pine Needle, Siberian	lb.	.60	.63
Rose, Natural	oz.	8.50	15.00
Artificial	oz.	2.00	2.75
Rosemary, U. S. P., drums	lb.	.39	.43
Tech., lb. tins	lb.	.32	.33
Sandalwood, E. Ind., U. S. P.	lb.	6.50	7.50
Sassafras, U. S. P.	lb.	1.00	1.20
Artificial	lb.	.27	.29
Spearmint, U. S. P.	lb.	1.40	1.55
Thyme, red, U. S. P.	lb.	.50	.65
White, U. S. P.	lb.	.85	.90
Vetivert, Bourbon	lb.	4.50	5.00
Java	lb.	16.00	20.00
Ylang Ylang, Bourbon	lb.	5.15	6.50

Aromatic Chemicals

Acetophenone, C. P.	lb.	\$2.00	\$3.00
Amyl Cinnamic Aldehyde	lb.	3.50	4.25
Anethol	lb.	1.20	1.40
Benzaldehyde, tech.	lb.	.60	.65
U. S. P.	lb.	1.20	1.35
Benzyl, Acetate	lb.	.65	1.00
Alcohol	lb.	.85	1.40
Citral	lb.	2.10	2.40
Citronellal	lb.	1.75	2.50
Citronellol	lb.	2.50	3.50
Citronellyl Acetate	lb.	4.50	7.00
Coumarin	lb.	3.60	4.00
Diphenyl oxide	lb.	1.15	1.25
Eucalyptol, U. S. P.	lb.	.60	.70
Eugenol, U. S. P.	lb.	3.00	4.00
Geraniol, Domestic	lb.	1.45	2.00
Imported	lb.	2.00	3.25
Geranyl Acetate	lb.	2.50	4.00
Heliotropin, dom.	lb.	2.00	2.50
Imported	lb.	2.50	4.00
Hydroxycitronellal	lb.	3.50	9.00
Indol, C. P.	oz.	2.50	5.00
Ionone	lb.	4.00	6.50
Iso-Eugenol	lb.	4.00	5.00
Linalool	lb.	1.95	3.25
Linalyl Acetate	lb.	2.50	3.25
Menthol	lb.	3.35	3.50
Methyl Acetophenone	lb.	2.50	3.00
Anthranilate	lb.	2.20	2.60
Paracresol	lb.	4.50	6.00
Salicylate, U. S. P.	lb.	.40	.45
Musk Ambrette	lb.	6.75	7.25
Ketone	lb.	6.00	7.50
Moskene	lb.	5.40	5.90
Xylene	lb.	2.75	3.00
Phenylacetaldehyde	lb.	\$5.00	\$7.50
Phenylacetic Acid, 1 lb., bot.	lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.	lb.	4.25	4.50
Rhodinol	lb.	6.00	9.50
Safrol	lb.	.29	.31
Terpineol, C. P., 1,000 lb. drs.	lb.	.28	.30
Cans	lb.	.33	.34
Terpinyl Acetate, 25 lb. cans	lb.	.80	.95
Thymol, U. S. P.	lb.	1.50	1.75
Vanillin, U. S. P.	lb.	4.50	5.75
Yara Yara	lb.	1.60	3.00
Insect powder, bbls.	lb.	.20	.22
Concentrated Extract	gal.	1.50	1.70
Gums—			
Arabic, Amb. Sts.	lb.	.06½	.07½
White, powdered	lb.	.12	.15
Karaya, powdered	lb.	.14	.16
Tragacanth, Aleppo, No. 1.	lb.	1.00	1.05
Sorts	lb.	.10	.15
Waxes—			
Bayberry, bgs.	lb.	.16	.20
Bees, white	lb.	.34	.38
African, bgs.	lb.	.15	.15½
Refined, yel.	lb.	.25	.30
Candelilla, bgs.	lb.	.14	.15
Carnauba, No. 1	lb.	.23	.23½
No. 2, Yel.	lb.	.22	.22½
No. 3, Chalky	lb.	.11	.11½
Japan, cases	lb.	.09	.09½
Paraffin, ref. 125-130.	lb.	.03%	.04%



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An ink removing cream is prepared from a mixture of alcohol, hydrogen peroxide, ammonia water, and soap. The mixture is allowed to stand for five minutes and then heated for 20 minutes to a point below any substantial volatilization, cooled and shaken to form a cream.—U. S. Patent No. 1,831,611.

United Laboratories, New York, essential oils and aromatics, moved recently from 15 S. William street to new quarters at 8 E. 12th street, where the company occupies the entire seventh floor of the building.

Armstrong Cork Co., Lancaster, Pa., recently mailed the second issue of their new house organ "Moderns Closures" to the trade. Of particular interest was the company's announcement about their new line of art metal caps, thus completing practically the entire range in closure manufacture.

The first number of the *Chemical Digest*, issued by Foster D. Snell, Inc., Brooklyn, has recently appeared. It is planned to issue this publication quarterly, reproducing notes of interest to producers of various types of chemical products. In the first issue is included an article on the germ-killing power of soaps.

Appoints A. D. M. A. Committees

Arrangements for the coming convention of American Drug Manufacturers Association at White Sulphur Springs, West Virginia, April 18 to 21, are in the hands of A. D. Armstrong, Fritzsche Brothers, Inc., New York. He will be assisted by A. A. Wasserscheid, Mallinckrodt Chemical Works. Others serving on the various committees are:

Transportation Committee—Albert J. Teeter, Charles Pfizer & Co.; S. Barksdale Penick, Jr., S. B. Penick & Co.

Golf Committee—Victor Williams, Monsanto Chemical Works; Harold W. Simpkins, Mallinckrodt Chemical Works; Melville Eaton, The Norwich Pharmacal Co.

Ladies' Entertainment—A. A. Wasserscheid, Mallinckrodt Chemical Works; George Simon, Heyden Chemical Corp.; James T. Pardee, Dow Chemical Co.; Percy C. Magnus, Magnus, Mabee & Reynard; John P. Remensnyder, Heyden Chemical Corp.

Evening Entertainment—James J. Kerrigan, Merck & Co.; Frank McDonough, New York Quinine & Chemical Co.; James T. Pardee, Dow Chemical Co.

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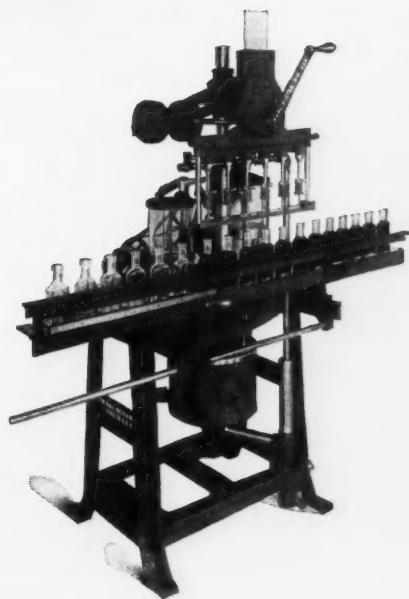
The bottles go right straight through the machine without the bother and additional operating expense of handling in trays. Direct discharge of bottles upon conveyor, if desired.

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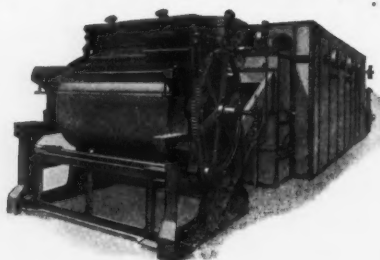
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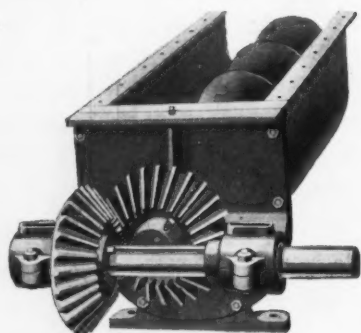


THIN CHIPS!

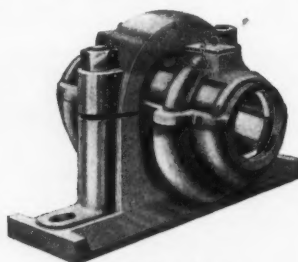
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Oil & Fat Section

A section of SOAP devoted to oils, fats, waxes, and edible oil products, published prior to Jan. 1, 1932 as a separate magazine under the title, *Oil & Fat Industries*.

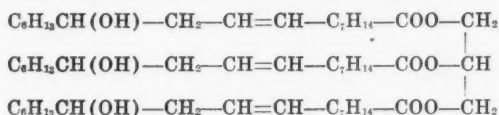
Castor Oil as a Source of Perfume Aromatics

By M. G. SHEPARD and P. J. LEAPER

Naugatuck Chemical Company

THE medicinal properties of castor oil are well known to nearly everyone. Few, however, are in the habit of associating this oil with perfumes, flavoring extracts, or the like. It has, nevertheless, a place in the perfuming materials industry, and chemical research is pointing the way to making this place even more important. The role of castor oil in this connection is not so much from the use of the material itself (although it does find use as a fixative) but because of the numerous other products which can be derived from it by chemical means. The properties of these derived products are, of course, far removed from those of castor oil. The connection is merely through the chain of chemical reactions which join these products with the parent raw material. The purpose of this paper is to point out some of the things which are already being done and to indicate some of the future possibilities. This same subject has also been touched upon by Viard (34) and Müller (51).

Composition of Castor Oil:—The principal ingredient of castor oil is the glyceride of ricinoleic acid, which may be written chemically as:



having an approximate molecular weight of 932.

The physical and chemical properties of castor oil of commerce vary somewhat depending upon

the grade of oil and the observer. In general, however, it may be expected to show approximately the following:

Acetyl Value	150
Reichert-Meisel Number	4 cc. — $\frac{\text{N}}{10}$ KOH
Specific Gravity	0.963
Unsaponifiable Matter	1%
Moisture	0.25%
Free Fatty Acid	1-4%
Saponification Value	180
Iodine Value	84
Solidifying Point	—10 to —12° C.
Maumené Test	47° C.
Refractive Index	1.47 to 1.48

Since it can be calculated from the formula that the acetyl value of the glyceride of ricinoleic acid is 159.1, and the usual actual value for castor oil is 150, the oil consists of about 94.2% of the glyceride. The remaining materials appear to consist of other fatty acids (52), or glycerides thereof, which are not important to the present discussion. According to Lewkowitsch, castor oil contains about 1% of hydroxystearic acid, which would give an acetyl value. However, the amount is not sufficient to change seriously the estimated content of glyceride of ricinoleic acid.

Pyrolysis of Castor Oil:—Lewkowitsch — "Chemical Technology and Analysis of Oils, Fats and Waxes"—Vol. II—page 414—published in 1922—states, "On a smaller scale castor oil is subjected to destructive distillation for the preparation of 'cognac oil'; when undecylenic acid and oenanthaldehyde passes over, whilst the

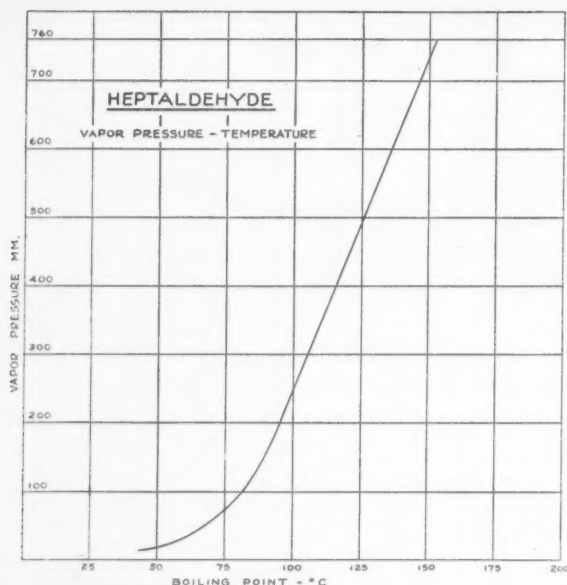
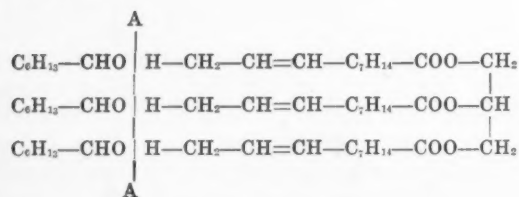


FIG 1

remaining mass solidifies to a very bulky, spongy, india-rubber-like mass, for which a solvent has not yet been found." This is the primary reaction to which the aromatics industry owes its interest in castor oil. It consists essentially in the destructive distillation of the oil, resulting in the pyrogenic decomposition of the glyceride of ricinoleic acid. In addition to the glyceride, the sodium salt or an ester of ricinoleic acid may be used. The reactions involved have been investigated by numerous workers (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (34) (51), but are still not any too well understood. When the natural oil is used, the first step in the mechanism appears to be the splitting of the glyceride through the line AA in the following structural formula:



giving three mols of heptaldehyde and one mol of the glyceride of undecylenic acid. If the distillation is continued long enough the latter apparently polymerizes, due to its unsaturated nature, to give the spongy mass referred to by Lewkowitsch and others.

Still further heating seems to break up the undecylenic acid glyceride in a number of ways, chief among which is a splitting at the glycerol end of the molecule giving undecylenic acid and acrolein. When an alkali salt of ricinoleic acid

is pyrogenically decomposed, the splitting takes place mainly at the double bond rather than at the hydroxy-carbon, the principal products being secondary octyl alcohol and methyl hexyl ketone, both of which have proved useful in perfumes (34) (51) (53) (56). Of course, none of these decompositions are as simple as indicated. In any pyrogenic decomposition, where the molecule is ruptured by such violent means, splitting takes place in many directions besides those most desired, resulting in many by-products.

In the case of castor oil, there is the added disadvantage that we are not even starting with a pure chemical. Hence, the three main products (heptaldehyde, undecylenic acid and acrolein) as recovered from the raw distillates are in

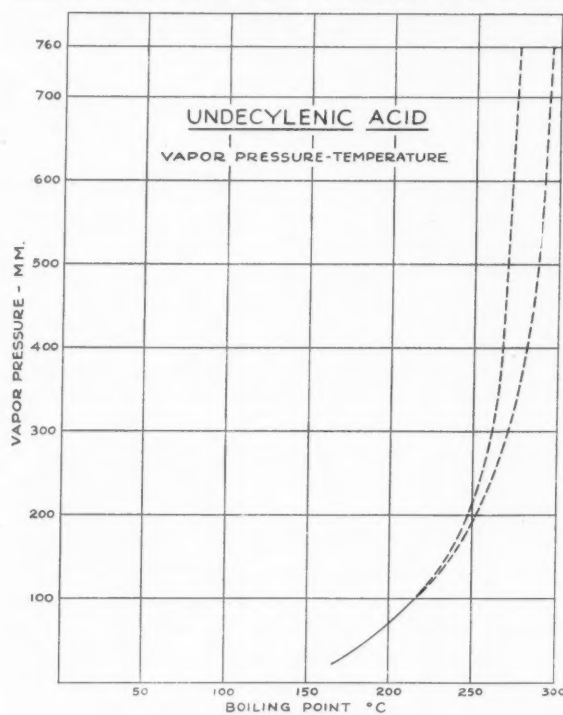


FIG. 2

a very crude form, requiring very careful purification before they are fit for any practical use. Naturally, on account of these side reactions, the yields of the main products are very much less than theory would indicate. Calculating from theory, one should obtain from 100 pounds of castor oil:

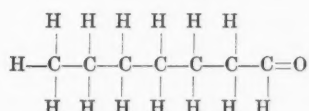
Heptaldehyde	34 pounds
Undecylenic Acid	55 "
Acrolein	5 "
Miscellaneous	6 "

100 pounds

However, the miscellaneous items are actually very much higher, and the main products corre-

spondingly lower. According to the literature, the actual yield of purified heptaldehyde is about 12% based on the weight of the castor oil. One of the greatest difficulties in purifying any of these products, so as to make them suitable for use in the aromatics industry, is that they become contaminated with acrolein or acrolein-like bodies which impart to them the rank odor commonly associated with burnt or rancid fats. Unless suitable precautions are taken, these odors will not only appear in the products themselves, but will also be carried on into any derivatives which may be made from them.

Heptaldehyde:—Heptaldehyde obtained from castor oil has the structural formula:



Hence, it is normal heptic aldehyde or normal heptanal. It has for several years been prepared commercially on a relatively large scale for use in the manufacture of aldehyde-amine condensation products, which find wide use in the rubber industry as accelerators of vulcanization. It is a strongly refractive liquid, having a penetrating aromatic odor. Its boiling points at various pressure are approximately as follows: (8) (12) (13) (14) (15) (16) (48):

760 mm.	155°C.
748	154
720	150
86	79
58	73
41	67
30	60
24	58
10	43

Hence, its vapor pressure—temperature curve is about as shown in Figure 1. Its specific gravity at 15°C. (compared with water at 4°C.) is 0.8252 and at 20°C. it is 0.8219 (48).

Heptaldehyde follows closely the usual chemical properties of aldehydes. It is readily oxidized to heptic acid (6) (17) (18) (19) (20) (34) (35). It is reduced to normal heptyl alcohol (12) (21) (28) (30) (32) (34) (36). These facts, of course, open up the possibility of forming a very large number of esters, either of heptic acid or heptyl alcohol, together with the very interesting combination of the two; namely, heptyl heptoate, which is already attracting some attention in the aromatics industry. It condenses upon itself in the presence of alkalis and acids to form polymerization products (12) (19) (22) (23) (26) (27) (29) which may prove very troublesome to users unless suitable preventative measure are taken. Some polymers
(Turn to Page 115)

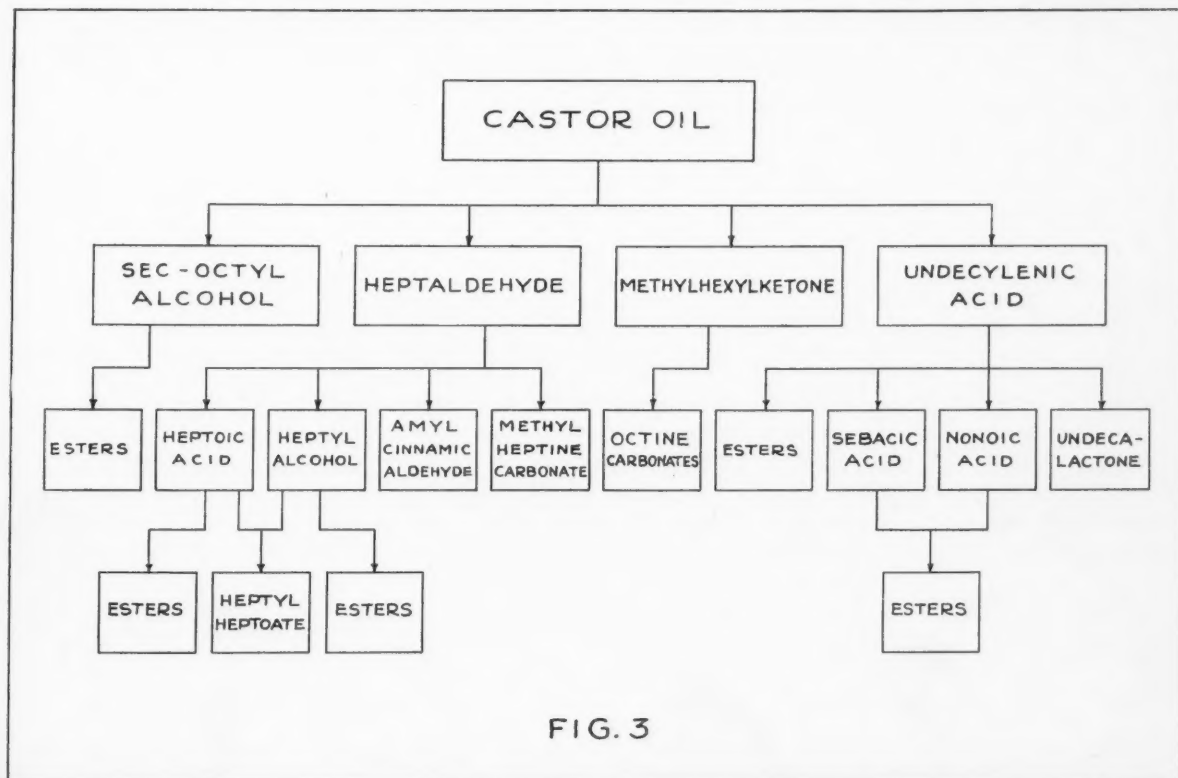
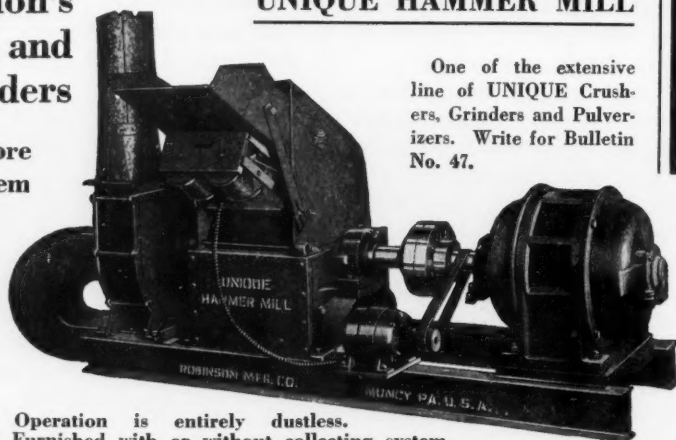
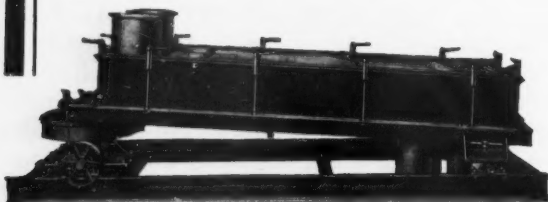


FIG. 3

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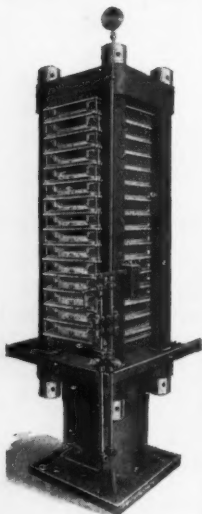
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Fat and Oil Production, Consumption Exports, Imports for Fourth Quarter, 1931

THE Department of Commerce announces that according to Census returns the factory production of fats and oils (exclusive of refined oils and derivatives) during the three-month period ended December 31, 1932, was as follows: vegetable oils, 1,032,935,862 pounds; fish oils, 17,677,142 pounds; animal fats, 576,013,339 pounds; and greases, 94,569,172 pounds; a total of 1,721,195,515 pounds. Of the several kinds of fats and oils covered by this inquiry, the largest production, 765,620,440 pounds, appears for cottonseed. Next in order is lard with 442,638,599 pounds; tallow with 132,204,993 pounds; linseed oil with 130,478,580 pounds; cocoanut oil with 68,701,773 pounds; corn oil with

30,223,081 pounds; and castor oil with 11,882,258 pounds. The production of refined oils during the period was as follows: Cottonseed, 659,225,395 pounds; coconut, 70,169,636 pounds; peanut, 1,899,904 pounds; corn, 30,214,656 pounds; soybean, 5,298,220 pounds; and palm-kernel, 6,693,761 pounds. The quantity of crude oil used in the production of each of these refined oils is included in the figure of crude consumed.

The data for the factory production, factory consumption, imports, exports and factory and warehouse stocks of fats and oils and for the raw materials used in the production of vegetable oils for the three-month period appear in the following statement:

Production, Consumption, and Stocks of Fats and Oils

	Factory operations for the quarter ended Dec. 31, 1931		Factory and Warehouse stocks, Dec. 31, 1931
	Production (pounds)	Consumption (pounds)	(pounds)
VEGETABLE OILS:			
Cottonseed, crude	765,620,440	703,916,518	126,760,735
Cottonseed, refined	659,225,395	297,179,345	489,866,209
Peanut, virgin and crude	3,319,678	2,080,469	5,046,040
Peanut, refined	1,899,904	2,982,359	1,530,640
Coconut, or copra, crude	68,701,773	142,434,837	188,352,321
Coconut, or copra, refined	70,169,636	78,039,432	14,800,229
Corn, crude	30,223,081	33,927,852	10,386,337
Corn, refined	30,214,656	7,921,716	12,873,095
Soybean, crude	10,655,357	7,748,531	13,635,137
Soybean, refined	5,298,220	3,691,544	4,714,300
Olive, edible	128,593	658,994	4,216,485
Olive, inedible .....	.....	1,518,549	1,376,512
Sulphur oil or olive foots .....	.....	8,527,011	8,981,149
Palm-kernel, crude	4,950,012	12,162,088	8,440,863
Palm-kernel, refined	6,693,761	5,938,926	1,663,305
Rapeseed .....	.....	2,045,520	3,866,570
Linseed	130,478,580	57,354,022	154,490,275
Chinese wood or tung .....	.....	16,746,860	33,413,697
Chinese vegetable tallow .....	.....	892,072	634,888
Castor	11,882,258	3,517,955	11,887,155
Palm .....	.....	51,756,347	89,053,994
Sesame	6,265,526	7,882,245	10,703,864
Sunflower seed .....	.....	2,804,749	338,830
All other	910,564	1,350,590	7,463,778

Production, Consumption, and Stocks of Fats and Oils (Continued)

	Factory operations for the quarter ended Dec. 31, 1931		Factory and Warehouse stocks, Dec. 31, 1931
	Production (pounds)	Consumption (pounds)	(pounds)
FISH OILS:			
Cod and cod-liver	191,751	3,065,832	7,773,313
Menhaden	1,915,765	5,916,859	8,675,336
Whale	15,863	15,208,471	126,717,627
Herring, including sardine	15,342,525	16,027,251	74,997,738
Sperm .....	.....	217,600	3,064,410
All other, (including marine animal)	211,238	456,767	16,704,995
ANIMAL FATS:			
Lard, neutral	7,671,517	4,712,070	2,085,133
Lard, other edible	434,967,082	5,918,347	51,035,369
Tallow, edible	16,551,934	14,916,604	4,899,430
Tallow, inedible	115,653,059	146,695,988	163,378,748
Neat's-foot oil	1,169,747	1,145,738	1,184,529
GREASES:			
White	17,483,749	9,311,386	10,279,506
Yellow	21,464,437	7,080,196	12,380,543
Brown	13,908,445	14,287,802	21,362,881
Bone	5,979,279	40,017	3,524,892
Tankage	13,620,877	83,319	7,258,794
Garbage or house	16,919,244	14,022,706	21,700,688
Wool	1,379,134	924,511	5,742,797
Recovered	532,730	462,111	5,011,506
All other	3,281,277	3,476,327	3,757,888
OTHER PRODUCTS:			
Lard compounds and other lard substitutes	306,559,169	837,197	24,756,610
Hydrogenated oils	163,830,450	134,309,461	27,269,361
Stearin, vegetable	2,804,356	4,456,192	1,847,961
Stearin, animal, edible	12,729,806	6,822,169	4,581,869
Stearin, animal, inedible	1,986,191	3,172,093	7,186,373
Oleo oil	24,423,888	8,581,073	4,864,216
Lard oil	2,350,371	2,155,114	3,989,413
Tallow oil	3,883,568	2,244,015	2,856,488
Fatty acids	28,857,628	31,060,321	8,910,610
Fatty acids, distilled	9,199,459	7,680,651	3,316,518
Red oil	7,322,788	4,673,228	9,666,342
Stearic acid	5,394,370	2,128,500	4,403,152
Glycerin, crude 80% basis	33,395,551	34,909,770	15,368,286
Glycerin, dynamite	12,353,413	3,840,724	11,749,900
Glycerin, chemically pure	16,359,665	2,021,400	11,177,720
Cottonseed foots, 50% basis	71,683,532	69,428,328	75,699,234
Cottonseed foots, distilled	23,150,165	23,336,229	7,380,229
Other vegetable oil foots	19,588,432	8,570,849	4,673,118
Other vegetable oil foots, distilled	30,472	2,121,950	1,888,324
Acidulated soap stock	20,004,487	13,318,448	16,984,118
Miscellaneous soap stock	269,319	367,342	702,351

Imports of Oil Seeds

	Tons		Tons
Castor beans	12,006	Poppy seed	1,222
Copra	57,440	Perilla and sesame seed	1,576
Flaxseed	81,149	Other oil seeds	1,988
Palm kernels	2,591		

Raw Materials Used in the Manufacture of Vegetable Oils

	Tons of 2,000 pounds			Tons of 2,000 pounds	
	Consumed			Consumed	
	Sept. 30 to	On hand		Sept. 30 to	On hand
	Dec. 31	Dec. 31		Dec. 31	Dec. 31
Cottonseed	2,447,495	1,400,325	Olives	575	43
Peanuts, hulled	4,207	593	Flaxseed	199,149	104,192
Peanuts, in the hull....	1,377	229	Castor beans	13,211	8,265
Copra	53,860	25,106	Mustard seed	209	1,301
Coconuts and skins....	663	3	Soybeans	38,803	64,786
Corn germs	60,827	219	Sesame	6,488	1,175
Palm kernels	5,465	231	Other kinds	1,408	1,960

Imports of Foreign Fats and Oils

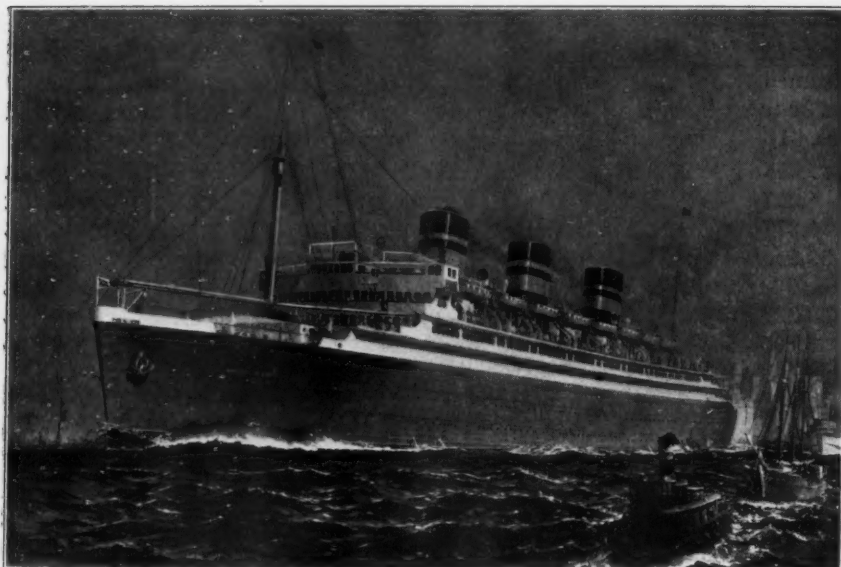
	Pounds		Pounds
Animal oils & fats, edible.....	87,629	Tung oil	17,040,651
Whale oil	1,803,255	Coconut oil	72,541,052
Cod oil	4,390,065	Sulphur oil or olive foots	8,450,303
Cod-liver oil	3,511,252	Other olive oil, inedible	2,027,264
Other fish oils	7,386,060	Palm-kernel oil	3,820,761
Tallow	1,139,846	Sesame oil	368
Wool grease	1,065,311	Cornalba wax	1,598,269
Oleic Acid or Red oil	99,230	Other vegetable wax	659,877
Stearic acid	1,738,186	Rape (colza) oil	2,563,020
Grease and oils, n.e.s. (Value)....	\$9,224	Linseed oil	9,254
Olive oil, edible	16,345,138	Soybean oil	732,088
Peanut oil	2,136,660	Perilla oil	120,000
Palm oil	57,234,982	Other expressed oils	583,649
Other edible vegetable oils	2,811,277	Glycerin, crude	2,351,659
		Glycerin, refined	1,107,558

Exports of Foreign Fats and Oils

	Pounds		Pounds
Animal fats & oils, edible .....	.....	Palm & palm-kernel oil	321,687
Fish oils	63,317	Peanut oil	6,109,959
Other animal oils and fats, inedible.	44,436	Soybean oil	382,750
Olive oil, edible	17,423	Other expressed oils & fats	2,106,808
Tung oil	1,038,072	Vegetable wax	94,271
Coconut oil	61,597		

Exports of Domestic Fats and Oils

	Pounds		Pounds
Oleo oil	12,452,789	Other animal greases & fats	17,430,208
Oleo stock	2,111,511	Cottonseed oil, crude	2,272,465
Tallow	190,394	Cottonseed oil, refined	1,556,809
Lard	144,349,223	Coconut oil, crude	4,815,368
Lard, neutral	2,481,129	Coconut oil, refined	507,566
Lard compounds, containing animal fats	448,963	Corn oil	113,263
Oleo stearin	1,538,002	Soybean oil	672,124
Neat's-foot oil	283,364	Vegetable oil lard compounds	748,489
Other animal oils, inedible	269,941	Other edible vegetable oils and fats	1,917,100
Fish oils	129,615	Linseed oil	172,072
Grease stearin	978,446	Other expressed oils and fats, inedible	455,812
Oleic acid, or red oil	233,743	Vegetable soap stock	5,308,895
Stearic acid	29,874	Glycerin	64,212



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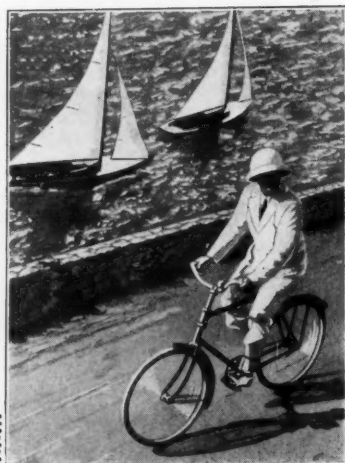
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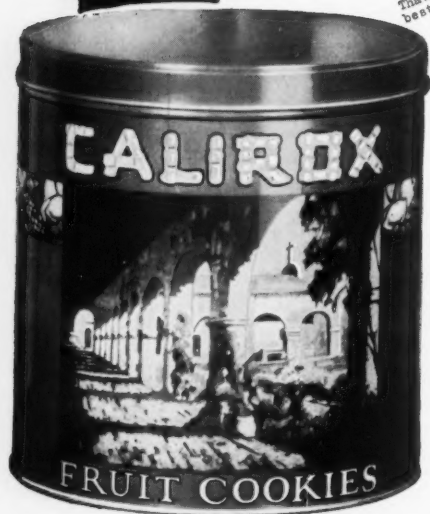
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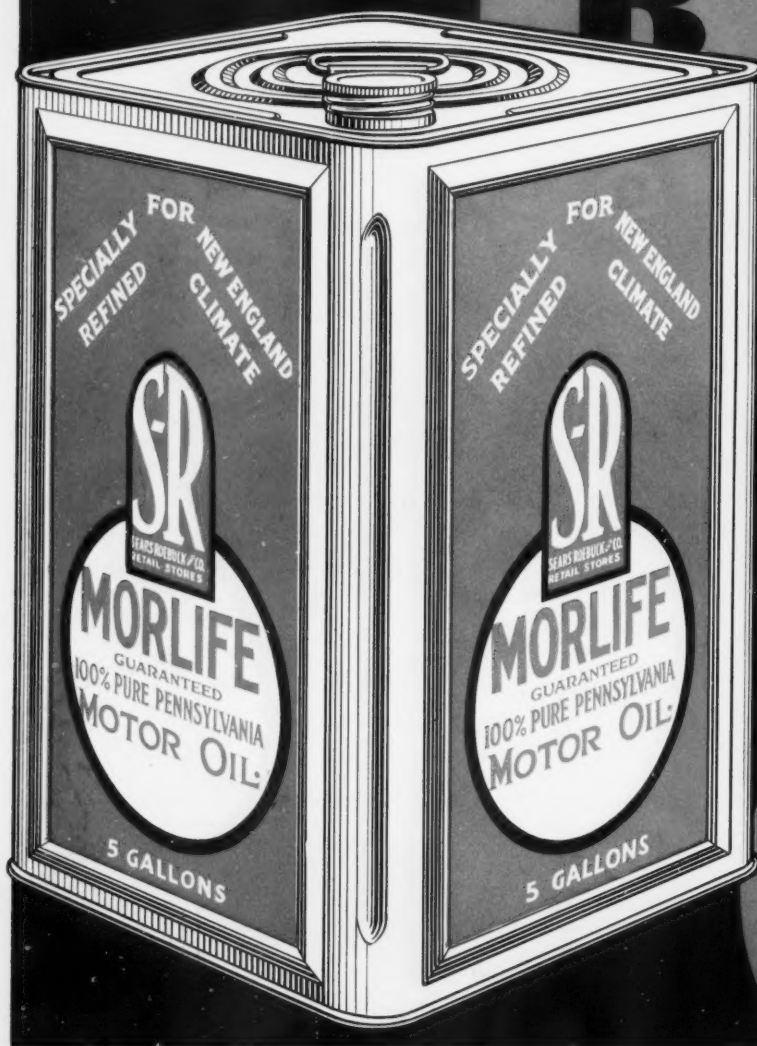
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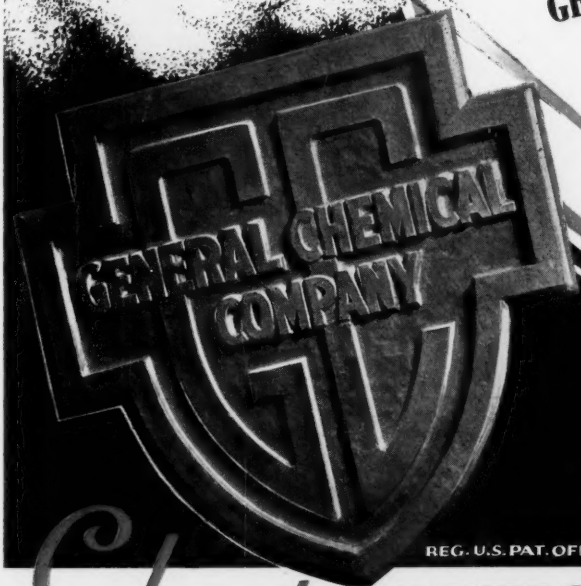
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SODIUM FLUORIDE

Say you saw it in SOAP!



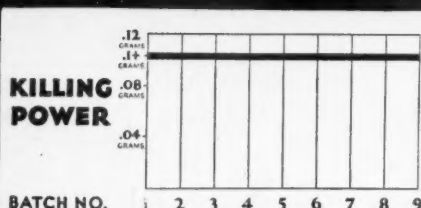
$\frac{1}{3}$ of all Pyrethrum Flower Imports

in 1931 were used in making **PYROCID No. 20**

The Only Standardized Concentrated
Pyrethrum Extract

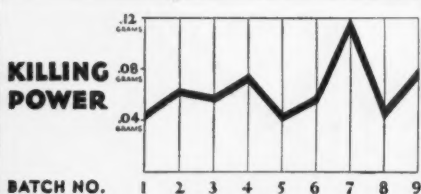
KILLING POWER

of Pyrocide No. 20 compared with
unstandardized Pyrethrum extracts



PYROCID No. 20

When you use Pyrocide No. 20 as the base for your fly spray or household insecticide, using one part Pyrocide in 20 parts light mineral oil, the pyrethrin content is stabilized at .12 grams per 100 cc.—every batch the same—because the pyrethrin content of Pyrocide No. 20 is standardized.



NOT STANDARDIZED (Pyrethrin Content Fluctuates)

When you use pyrethrum concentrate made by direct extraction (and not standardized) the pyrethrin content of each batch of fly spray or household insecticide will vary, as widely as from .04 grams to .12 grams per 100 cc.

JUST three years ago, Pyrocide No. 20 was first introduced on the market, and today the makers of Pyrocide No. 20 are using $\frac{1}{3}$ of all the Pyrethrum flowers imported into this country. This statement is based on official United States Government reports showing the imports into this country in 1931.

What does this prove? It proves that the insecticide industry prefers a *standardized* pyrethrum extract. Therefore, the industry has turned to Pyrocide No. 20 which is the only *standardized* concentrated extract with a guaranteed, absolutely stabilized pyrethrin content. Because of this, you can guarantee the toxic strength of your finished product.

There is another reason why the industry has turned to Pyrocide No. 20. Due to our new laboratories established in Japan, we can buy flowers of a higher pyrethrin content at the same price that other manufacturers are forced to pay for inferior flowers.

Pyrocide No. 20 is manufactured in our own plant. No oleoresin is purchased from other manufacturers. We believe that the only way to produce a reliable product is by placing the raw material sources and the manufacturing process under unified laboratory control.

We have no secrets in connection with our processes or production methods. Anyone is welcome to visit our plant at any time for inspection. Pyrocide No. 20 contains nothing more toxic to humans than pyrethrum, nor does it contain any other active principle, the efficiency of which is as yet unproved in the control of flies.

Warehouse stocks are carried at New York, Los Angeles, Minneapolis and many foreign points. For your own percolation, we can also supply you with Pyrethrum flowers with known pyrethrin content in whole, ground and powdered form.

McLAUGHLIN GORMLEY KING COMPANY
1715 Fifth Street SE., Minneapolis • Pyrethrum Specialists Since 1901

PYROCID No. 20

STANDARDIZED EXTRACT OF PYRETHRUM FLOWERS

Say you saw it in SOAP!

Baird's

Certified Coal-Tar Disinfectants

are known and used throughout the world because of their quality, dependability and efficiency. They are supplied only in concentrated form, dilute readily with water to form rich, milky emulsions, which do not separate on standing, and have a good clean odor of tar. Each batch is tested for germicidal strength.

Cresol Comp. U. S. P.

also known as Liquor Cresolis Compositus, U. S. P., is made in exact accordance with the specifications of the U. S. Pharmacopoeia. Phenol coefficient $2\frac{1}{2}$ to 3. Dilutes with water to form clear, amber-colored solutions. Largely used by the medical profession, hospitals and veterinarians.

Crestall Compound

is similar in composition, appearance and odor to Cresol Compound, U. S. P., but prepared from refined cresylic acid as a base. Approximately twice as strong as the U. S. P. product, and very effective in preventing the spread of animal diseases.

Mosquito Larvaecide

A coal-tar product employed for killing mosquito larvae. Effective in dilutions of 20,000 to 40,000 to one. Superior to petroleum oil, as it is not affected by rain-fall or wind and does not involve fire hazard.

Pes-Tox Insecticide

of the pyrethrum type, pleasantly scented. Quickly kills practically every type of crawling, flying and hopping insect. Light lemon color. Especially effective when used in the form of a spray.

Pine Oil Disinfectant

A fragrant pine product, made from pure steam-distilled pine oil according to the formula of the Hygienic Laboratory of the U. S. Public Health Service. Mixes freely with water to form good milk emulsions, with pleasant pine odor. Free from mineral oil or other adulteration.

BAIRD & McGUIRE, INC.

Holbrook, Mass.



St. Louis, Mo.

New York City and New Jersey Representatives:

Eastern States Supply Company, 136 Liberty St., New York City
Telephone WOrth 2-3143.

Say you saw it in SOAP!

|||
FLORITA—

|||
for your fly spray—

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It's Different!

Do This:—Use equal money's worth of FLORITA as you use of your present perfume. Spray side by side. Have disinterested parties tell you which one they prefer. Tabulate results.

Liberal sample on request.

—
FELTON CHEMICAL COMPANY

Chicago, Ill., Office—1200 North Ashland Ave.

Executive Offices and Factory—599 Johnson Ave., Brooklyn, N. Y.

Say you saw it in SOAP!



Yarmor Helps Cows to Graze in Comfort

Cows that are sprayed with cattle sprays containing Yarmor Steam-distilled Pine Oil are not annoyed by stable flies, horn flies, common house flies, or psychoda.

The spraying is done, of course, in milking sheds, barns, and stables, but the effect of the spray lasts for some time and enables cows to graze in comfort. The phrase "contented cows" is not just an empty expression, because "contented cows" give more and richer milk.

Yarmor Pine Oil cattle sprays also have a disinfectant and deodorant value, and, if the concentration used is sufficiently high, they help heal cuts and open wounds.

Let us send you information of importance to spray manufacturers. Use the coupon at the bottom of this page.

Steam-distilled Wood
Turpentine

Wood Rosin

Steam-distilled Pine Oil

Alpha Terpineol

Commercial Abietic Acid

Methyl Abietate

Nitrocellulose

Chemical Cotton



NAVAL STORES DEPARTMENT

HERCULES POWDER COMPANY
INCORPORATED

961 Market Street, Wilmington, Delaware

Branch Offices...Chicago...New York...St. Louis...Salt Lake City...San Francisco

Hercules Powder Company, 961 Market Street, Wilmington, Delaware

Please send a sample of Yarmor Steam-distilled Pine Oil ☐

Please send information regarding Yarmor Steam-distilled Pine Oil for cattle sprays ☐

Name..... Company.....

Street..... City..... State.....

QQ-28

Say you saw it in SOAP!

Pine - Gloss Cleanser



A Beauty
TREATMENT
for
DOWNTRODDEN
FLOORS

FINE FOR FINE FLOORS

Recommended for Linoleum, Rubber Inlaid, Tile, Terazzo Floors. Also for Painted and Varnished Woodwork and Furniture.

cleans
preserves
polishes } *in 1*
OPERATION

PINE - GLOSS CLEANSER

is a thick, golden amber liquid composed of pure vegetable oils saponified, then combined by a special formula with cleansing, fragrant pine oils. A cupful to a pail of hot water cleans faster, easier, safer.

Pine - Gloss will prove a timely and valuable addition to your line.

ATTRACTIVE CIRCULARS AND LABELS FOR YOUR IMPRINT

For your own benefit better get in touch with us on this proven money maker.
And how about the items listed on the bottom?

CLIFTON CHEMICAL COMPANY, Inc.

Clifton Bldg.

246 Front St., N. Y. City

Liquid Soaps—Bases—Dispensers—Disinfectants—Deodorizing Blocks and Containers—and KINDRED PRODUCTS

Say you saw it in SOAP!

COAL TAR DISINFECTANTS

KOPPERS

DISINFECTANTS

COAL TAR DISINFECTANT
(Coefficients 2-20)

TAR ACID OILS

CRESOL COMPOUNDS
(Liq. Cresolis Compositus U.S.P.
Cresol Compound Technical)

ANIMAL DIPS

CATTLE SPRAYS

CRESOL U. S. P.

CRESYLIC ACID

LIGHT OIL DISTILLATES
(Benzol, Toluol, Xylol, Solvent
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WOOD PRESERVATIVES

AGRICULTURAL
CHEMICALS
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NAPHTHALENE
(Crude and Refined . . . All
Kinds . . . Moth Balls . . . Flakes)

With unexcelled facilities for producing our own raw materials and for compounding and testing them in our own plants and laboratories, we guarantee Dependable Disinfectants of both soluble and emulsifiable types. Our soluble disinfectants form clear, pale solutions and our emulsifiable ones form rich, milky solutions, free from deposit when diluted with water. Our Frozen Tar Acid Oils (10% to 40% strength), properly compounded, yield white-emulsion disinfectants free from naphthalene deposits. Samples, prices and full information furnished gladly on request.



These products can be bought by the can or car-load . . . put up as your own brand . . . or shipped in bulk.

KOPPERS PRODUCTS CO.

PROVIDENCE

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THE WHITE TAR COMPANY

KEARNY, NEW JERSEY

Subsidiaries of The Koppers Company

Say you saw it in SOAP!

van Ameringen-

Whatever Helps a Little, Helps a Lot

Are you making a product that ought to be perfumed, or that would sell better if it were?

Does your product have an unpleasant odor that nourishes sales resistance?

These are not *out-of-the-ordinary* conditions. We meet them daily.

If you have a problem in which perfuming may help, consult us. Even if you haven't thought of it as a problem, show us your product and let us see if we can improve matters.

Perhaps our effort will point the way to increased sales. These are times when anything that helps at all, helps a lot.

In this sort of work, there is no obligation either way. We ask nothing of you but a willingness to buy our perfume materials if they do a good job at a fair cost.

We are not always successful, but our average of successes is pretty high. We do not hesitate to tell you the truth about what our products can or cannot do for you.

—if we have the opportunity.

—and that's up to you.

van Ameringen-Haebler, Inc.

Aromatic Essentials

315 Fourth Avenue, New York

180 No. Wacker Drive, Chicago

619 Clark Avenue, St. Louis

42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Say you saw it in SOAP!

Haebler, Inc.

Better Odors Often Make Better Sales

van Ameringen-Haebler, Inc., is an organization of about sixty people. We maintain several offices, and a factory. We import and manufacture perfume materials for use in

Soap	Disinfectants
Shampoos	Insecticides
Liquid Soap	Fungicides
Perfume	Paint
Face Powder	Urinal Blocks
Cosmetics	Moth Repellants
Hand Soap	Metal Polish
Soap Powder	Leather
Ink	Fabrics
Paste	Hair Preparations
Ointments	Antiseptics

and many other materials

We invite a frank statement of the conditions which our odors are expected to overcome. If possible send us a sample of your product *unperfumed*. We will be glad to work on it and return our suggestions and quotations.

van Ameringen-Haebler, Inc.

Aromatic Essentials

315 Fourth Avenue, New York
180 No. Wacker Drive, Chicago
619 Clark Avenue, St. Louis
42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Say you saw it in SOAP!

Baird's

Certified Disinfectants

of coal-tar are so named because every lot is tested and certified to by independent analysts, thus insuring to the buyer a guarantee of quality and strength. A copy of the bacteriological certificate will be furnished whenever requested.

The name BAIRD'S on a container of disinfectant means not only that it is a certified product, but one which represents over a quarter of a century of manufacturing experience and technical skill . . . insuring uniformity of composition . . . uniformity of quality . . . uniformity of result. BAIRD'S Certified Disinfectants dilute readily with water to form rich, milky emulsions.

Whether your disinfectant requirements are large or small, or whether the coefficient is two or twenty or any intermediate strength, let us figure with you. Samples will be submitted for your inspection, and we will be glad to give you the benefit of our many years of experience as specialists in this line.

Cresylic Acid

Animal Dips

Household Insecticide

Made Right—Priced Right

BAIRD & MCGUIRE, INC.

Manufacturers of

Baird's

Certified Disinfectants
and Quality Sanitary Products

HOLBROOK, MASS.



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New York Representatives

THE EASTERN STATES SUPPLY COMPANY
136 Liberty Street Phone: WOrth 2-3143

Warehouse stocks at convenient points throughout the country.

Say you saw it in SOAP!



INSECTICIDE AND DISINFECTANT SECTION



A Department of SOAP

SOAP is official publication of *The Insecticide and Disinfectant Manufacturers Association*.
Harry W. Cole, Holbrook, Mass., Secretary.

The New Insecticide Standard

THE Insecticide & Disinfectant Manufacturers Association has adopted, following a referendum by mail, a new official minimum standard for a liquid spray insecticide. This standard calls for a minimum of 95 per cent "down" and 60 per cent kill by the Peet-Grady Method against house flies.

This is the first official standard ever adopted by the Association. That it is a forward step, an aggressive step to clarify the atmosphere in the liquid spray insecticide business, goes without saying. That it should represent one of the best practical means of protection for the buyer is obvious. A sensible specification has been set up by the trade association of the industry where no generally accepted or sound specification existed before.

The new minimum standard should receive the widest publicity among both buyers and manufacturers. Every effort will be made to broadcast it throughout the land with a view to its adoption completely by the industry, and by purchasers and industrial consumers generally.

—o—

Data on the sale of insecticides and disinfectants in the drug store are being collected in the National Drug Store Survey being conducted under the auspices of the Chemical Division of the Department of Commerce. The specific information is being secured in the regular course of the survey, but will be published separately

upon completion of the study. The facts should prove of very material and practical value to the manufacturers and marketers of branded packaged goods when the survey is completed.

Pyrethrum and the "War"

WHAT effect is the Japanese-Chinese trouble in Shanghai and Manchuria likely to have on the pyrethrum market? We have been asked this question several times. To us, it appears that the effect is not likely to be very great. In the first place, the "war" is being fought in China, and pyrethrum grows in Japan. In the second place, the "war" does not seem likely to affect any great part of the total Japanese population. Those involved thus far are the Japanese navy and units of the regular army, and not the general population. There might be some effect on exchange, but this, we do not believe is likely to bring any wide fluctuations in pyrethrum prices.

—o—

While the official adoption of the new insecticide standard by the Insecticide and Disinfectant Manufacturers Association is fresh in all minds, there might be some further serious consideration given to compulsory marking of disinfectant containers with the phenol coefficient, and the official adoption of the F.D.A. Method for the determination of the phenol coefficient. Marking of containers seems destined to become mandatory.

The Insecticide and Disinfectant Manufacturers Association

OFFICERS

President.....	Evans E. A. Stone William Peterman, Inc., New York
1st Vice-President.....	Peter Dougan Merck & Co., Rahway, N. J.
2nd Vice-President.....	Samuel H. Bell Koppers Products Co., Pittsburgh
Treasurer.....	John Powell John Powell & Co., New York
Secretary.....	Harry W. Cole Baird & McGuire, Holbrook, Mass.

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S. S. Selig.....	The Selig Co., Atlanta
Dr. Robert C. White.....	Robt. C. White Co., Philadelphia
W. J. Zick.....	Stanco, Inc., New York

Membership

Active—Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues—\$75.00 per year.

Associate—Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—\$50.00 per year.

For further details, communicate with

**INSECTICIDE & DISINFECTANT
MANUFACTURERS ASSOCIATION**

Harry W. Cole, Secretary

HOLBROOK

MASS.

Notes of the Trade

J. N. Forker, president, Koppers Products Co., Pittsburgh, sailed for Europe, Feb. 26, for a business trip of a month abroad.

W. B. McCloud & Co., insecticides, 325 West Huron street, Chicago, have been elected to active membership in the Insecticide and Disinfectant Manufacturers Association. Walter S. McCloud heads the concern which was established in 1904.

Zonite Products Corp. earned \$53,177 during the year, 1931, equal to \$1.13 a share on the common stock. This compares with \$750,608, or 89c a share, in 1930.

McCormick & Co., Baltimore has started its sales campaign on "Bee Brand" liquid insecticide, a group of special men now being engaged in covering the retail trade. A number of deals are being offered to stimulate early buying. In connection with the drive there will be an extensive campaign of newspaper advertising and fourteen thousand window displays.

It is reported by U. S. Dept. of Commerce that the Anglo-Ecuadorian Oilfields (Ltd.), a British oil company operating in Ecuador, markets a pyrethrum-base household insecticide, under the name "Chimba." The market is also amply supplied with several American products and competition is reported keen. The most popular cattle dip is a British product made by Cooper, McDougall, and Robertson.

Arthur Rosenberg Co., New York, will handle the advertising campaign for Cliot Closet Moth Proofer Co., New York, on a line of moth killers and deodorants now being introduced.

John Morris Weiss, Weiss & Downs, Inc., spoke on "The Distillation of Coaltar" at a meeting of the American section of the Society of Chemical Industry held in the Hotel New Yorker, February 26. He discussed various cracking systems used in the United States, and set up criteria for an ideal system.

S. B. Penick & Co., New York, has issued a crude drug price list and manual, with quotations as of Feb. 1, 1932. Copies may be obtained by addressing S. B. Penick & Co. at 115 Fulton street, New York.

Say you saw it in SOAP!

Adopt Insecticide Standard

Insecticide & Disinfectant Manufacturers Association Adopts Minimum Standard for Liquid Household Insecticides

A MINIMUM standard for liquid household insecticides has been officially adopted by the Insecticide & Disinfectant Manufacturers Association, following a mail referendum among the membership of the Association conducted by the Secretary on a standard proposed by the Insecticide Committee of the Association. The new minimum standard calls for 95 per cent down in ten minutes and a 60 per cent kill in twenty-four hours by the Peet-Grady Biological Method for testing insecticides. It also calls for a minimum flash point of 120 deg. F. for the petroleum base as determined by the Tagliabue open cup method. The vote on the adoption of the standard was verified at a meeting of the Board of Governors of the Association at the Hotel New Yorker, New York, on March 8, and the standard was declared officially adopted at that time.

The recommendation of the Insecticide Committee which was adopted, stated in its final form: "The members of the Insecticide & Disinfectant Manufacturers Association agree that a minimum standard for a general household liquid spray insecticide should be 95% down ten minutes after spraying, and at least 60% kill, twenty-four hours after spraying, as determined by the Peet-Grady Method on house flies. In addition, the liquid base should exceed 120 deg. F. in flash-point as determined by the Tagliabue open cup method, and should not be referred to as kerosene, kerosene petroleum, or petroleum insecticide base in the future, but as a hydrocarbon distillate base. These tests shall be conducted at a temperature of 85 deg. F. and 60 to 70% relative humidity. To compare the resistance of flies used in one laboratory to those used in another laboratory, this method will be followed out using ordinary kerosene as originating in the Pennsylvania field. Per cent knock-down and per cent kill by this oil will be set forth in the complete specification. The flies used in this test shall be five days old."

"This is the understanding of the proposed standard based on all deliberations of the Insecticide Committee. It has passed by referendum to the Association members, as the majority have voted in favor of it. It is now offered for

ratification by the Board of Governors—C. P. McCormick, Chairman, Insecticide Committee.—March 1, 1932."

A STATEMENT by the Insecticide Committee explaining briefly their position and the reasons for recommending a definite minimum standard, was issued March 3, and stated in part:

"Manufacturers of household insecticides have, for a long time, seen the need for a standard method which might be used in checking up and controlling the minimum toxic quality of products that appear on the market. This need was first voiced by the manufacturers through the Insecticide & Disinfectant Manufacturers Association at their annual meeting, December, 1928.

"There were two committees appointed which functioned within the Insecticide & Disinfectant Manufacturers Association. To one committee was assigned the study of the merits and the practicability of the most promising proposed chemical methods for the assaying of pyrethrum products. To the other committee, was assigned the study of the possible biological methods for determining the quality of pyrethrum products. Both of these committees presented progress reports as the data were assembled, but not until after the reports were presented at the annual meeting of the association in December, 1931, was there any indication as to which method would finally be adopted. When all the data in these reports was thoroughly studied and discussed, the Peet-Grady Method appeared to be the most practicable.

"It has been the aim of the I. & D. M. A. from the start to adopt finally a method which could be applied to finished products and that this method shall offer a means of comparing and checking the quality of other household insecticides as well as pyrethrum products on a common basis. The association has, therefore, adopted the Peet-Grady Method as a standard method to check the quality of any insecticide in question. The adoption of this method offers any manufacturer a reliable method to standardize his own products. At the same time, this method offers a means which may be used in checking up the various competitive materials by state and federal

authorities. This condition should ultimately greatly benefit the trade. However, we can see no reason why any manufacturer should not continue using his own particular method of standardization, whether chemical or biological, as long as the quality of the product which he places on the market has a killing power by the Peet-Grady Method which shall not be less than the minimum standard proposed by this Association."

COMPLETE details of the specifications and method will be published in the April issue of the Insecticide and Disinfectant Section of *Soap*. The technique of breeding and keeping flies for test purposes, and the complete Peet-Grady Biological Method for Testing Insecticides, now being reviewed and brought up to date by the original authors, Dr. C. H. Peet and A. C. Grady, will be published in full. The specifications for the Pennsylvania oil to be used as a standard in comparing the resistance of flies bred in one laboratory with other laboratories, will also be given, as will a source of supply of a product to be accepted as the standard.

Appoints I. & D. M. A. Committees

President Evans E. A. Stone of the Insecticide & Disinfectant Manufacturers Association has announced the appointment of the following committees for 1932:

Disinfectant

Peter Dougan, Merck & Co., Inc., Rahway, N. J., Chairman.
C. C. Baird, Baird & McGuire, Inc., Holbrook, Mass.
Henry A. Nelson, Chemical Supply Co., Cleveland, Ohio.
S. H. Bell, Koppers Products Co., Inc., Pittsburgh, Penna.
March G. Bennett, Samuel Cabot, Inc., Boston, Mass.

Insecticide

Chas. P. McCormick, McCormick & Co., Inc., Baltimore, Md., Chairman.
W. J. Andree, Sinclair Refining Co., New York City, N. Y.
W. J. Zick, Stanco, Incorporated, New York City, N. Y.
Dr. Robert C. White, Robert C. White Co., Philadelphia, Penna.
W. G. Griesemer, Black Flag Company, Baltimore, Md.

Disinfectant Standardization

Dr. William Dreyfus, West Disinfecting Co., Long Island City, N. Y., Chairman.
William A. Hadfield, General Laboratories, Inc., Madison, Wisconsin.
Dr. Emil Klarmann, Lehn & Fink, Inc., Bloomfield, N. J.
L. C. Himebaugh, Pease Laboratories, Inc., New York City, N. Y.
Burton G. Philbrick, Skinner & Sherman, Inc., Boston, Mass.
John H. Wright, Zonite Products Co., New York City, N. Y.
Dr. E. C. Fanto, McKesson & Robbins, Inc., Fairfield, Conn.

Insecticide Standardization

N. J. Gothard, Sinclair Refining Co., East Chicago, Indiana, Chairman.

C. B. Gnadinger, McLaughlin Gormley King Co., Minneapolis, Minn.
Dr. Alfred Weed, John Powell & Co., New York City, N. Y.
Dr. Chas. H. Peet, Rohm & Haas Co., Philadelphia, Penna.
Dr. A. E. Badertscher, McCormick & Co., Inc., Baltimore, Md.
F. W. Foreman, Toledo Rex Spray Co., Toledo, Ohio.
Dr. N. J. G. Alozery, Shell Petroleum Corp., St. Louis, Mo.

Liquid Soap

J. L. Brenn, Huntington Laboratories, Inc., Huntington, Indiana, Chairman.
John V. Halaska, Acme Chemical Co., Milwaukee, Wisconsin.
S. S. Selig, The Selig Co., Atlanta, Georgia.
V. W. Mider, U. S. Chemical Company, Greenville, Ohio.
F. J. Pollnow, Vestal Chemical Co., St. Louis, Mo.

Liquid Soap Standardization

Russell H. Young, Davies-Young Soap Co., Dayton, Ohio.
D. J. Bachrach, Clifton Chemical Co., New York City, N. Y.
C. L. Weirich, C. B. Dolge Company, Westport, Conn.

Membership

John Powell, John Powell & Co., Inc., New York City, Chairman.
J. W. Schiffer, Federal Sanitation Co., Cleveland, Ohio.
H. W. Hamilton, The White Tar Co., of N. J., Pittsburgh, Penna.
Preston B. Heller, B. Heller & Co., Chicago, Ill.
Fred A. Hoyt, Frederick Disinfectant Co., Atlanta, Ga.
James Varley, Baird & McGuire, Inc., St. Louis, Mo.
Edgar A. Murray, Edgar A. Murray Co., Detroit, Michigan.
Wallace Thomas, Gulf Refining Co., Pittsburgh, Penna.

Publicity

Ira P. MacNair, MacNair-Dorland Co., New York City, Chairman.
W. J. Zick, Stanco, Incorporated, New York City, N. Y.
H. W. Hamilton, The White Tar Co., of N. J., Pittsburgh, Penna.

Program

W. J. Andree, Sinclair Refining Co., New York City, N. Y., Chairman together with all members of the Board of Governors.

Trade Ethics

Dr. Robert C. White, Robert C. White Co., Philadelphia, Penna., Chairman.
A. McLaughlin, McLaughlin Gormley King Co., Minneapolis, Minn.
Fred A. Hoyt, Frederick Disinfectant Co., Atlanta, Ga.
D. N. Calkins, Rochester Germicide Co., Rochester, N. Y.

Scientific

Dr. Geo. F. Reddish, Lambert Pharmacal Co., St. Louis, Mo., Chairman.
Dr. B. T. Woodward, H. Clay Glover Co., New York City, N. Y.
Dr. Emil Klarmann, Lehn & Fink, Inc., Bloomfield, N. J.
L. C. Himebaugh, Pease Laboratories, Inc., New York City, N. Y.
Burton G. Philbrick, Skinner & Sherman, Inc., Boston, Mass.
John Powell, John Powell & Co., Inc., New York City, N. Y.
Dr. Charles H. Peet, Rohm & Haas Co., Philadelphia, Penna.

Entertainment

Grant A. Dorland, MacNair-Dorland Co., New York City.

Propose New Specification For Sweeping Compound

THE Federal Specifications Board has proposed a new specification for sweeping compound as purchased by the United States Government departments. This specification has been worked out and is submitted to the manufacturing industry with a view to securing the views of manufacturers on the new requirements. Criticism or comment regarding the new specification, as published below, should be directed to the Board at Washington, D. C. The specification is being published here at the special request of the committee in charge of its formulation.

A. Applicable Federal Specifications.

A-1. There are no other Federal Specification applicable to this specification.

A-2. Any special requirements of the individual department of the Government are noted under Section H.

B. Grade.

B-1. Sweeping Compound shall be of but one grade.

C. Material.

C-1. Sweeping compound shall be made of uniformly fine and high-grade materials throughout and shall be entirely satisfactory for the purpose intended.

D. General Requirements.

D-1. Sweeping compound shall consist of a uniform mixture of clean fine sand and finely ground sawdust properly impregnated with a refined heavy mineral oil and water.

E. Detail Requirements.

E-1. Sweeping compound shall show an analysis between 20% and 25% matter volatile at 105°C., not less than 5% of refined heavy mineral oil, not more than 50% of clean sand, and the remainder finely ground sawdust.

F. Method of Inspection, Tests, Etc.

F-1. Sampling.—Not less than 1 pound taken at random from each 1,000 pounds or less of any delivery shall constitute a sample. The samples shall be taken from the containers in such a man-

ner as to obtain a representative sample of the entire contents.

F-2. Tests.

F-2a. Determination of Matter Volatile at 105°C. Place 5 grams of sample in a tared weighing bottle and heat with stopper removed for 2 hours at a temperature of 105°C. Insert stopper, cool, and weigh. Calculate loss in weight as volatile matter.

F-2b. Determination of Heavy Mineral Oil. Extract thoroughly the sample used for determination of moisture content with ether or other suitable solvent and transfer this solution into a weighed crystallizing dish. Evaporate off the volatile matter first on steam bath, then dry at 105°C. for one hour, and weigh crystallizing dish with residue. Calculate weight of residue as heavy mineral oil.

F-2c. Determination of Sand. Place 5 grams of sample in a weighed (tared) porcelain crucible, ash to constant weight, cool, and weigh crucible with residue. Calculate weight of residue as sand.

F-2d. Determination of Sawdust. The sum of the moisture, heavy mineral oil, and sand subtracted from 100 is calculated as sawdust.

G. Packaging, Packing and Marking.

G-1. Packaging and Packing. Sweeping compound shall be delivered in well-coopered wooden barrels, with properly secured heads, containing about 200 pounds.

G-2. Marking. Unless otherwise specified, shipping containers shall be marked with the name of the material and the quantity contained therein, as defined by the contract or order under which the shipment is made, the name of the contractor, and the number of the contract or order.

G-3. Any special requirements of the individual departments are noted under section H.

H. Requirements Applicable to Individual Departments.

H-1. The following departmental specifications of the issue in effect on date of invitation
(Turn to Page 107)

Perfumes For

THEATRE SPRAYS

It makes no difference whether you use alcohol or water as a base. We can supply an odor to meet your requirements—an odor that will prove popular with your customers.

A few suggestions

for alcohol base sprays

for water base sprays

	Lb.		Lb.
American Thistle No. 1010.	\$2.25	Bouquet W. S. No. 636...	\$3.25
Lilac No. 59.....	2.50	Honeysuckle W. S. No. 561	2.25
Gardenia No. 1756.....	5.00	Narcissus W. S. No. 3855.	2.75
New Mown Hay No. 319.	2.75	New Mown Hay W. S.	
Peony No. 446.....	4.00	No. 260	2.50
Rose No. 310.....	2.50	Lilac W. S. No. 19.....	2.50
Trefle No. 619.....	2.85	Oriental W. S. No. 3858..	2.50
Violet No. 611.....	3.10	Rose W. S. No. 560.....	2.75
Wild Flowers No. 5300...	1.75	Trefle W. S. No. 4855....	3.00
		Violet W. S. No. 261....	2.75

Used one ounce to two gallons
of alcohol—either full strength
or diluted

Used one ounce to three or
five gallons of water according to
strength desired



P. R. DREYER INC.

26 Cliff Street

New York

"It's the Odor that Sells the Product"

Say you saw it in SOAP!

The Rat Flea As A Disease Carrier

By DR. CHARLES L. WILLIAMS*
U. S. Public Health Service

It is with a feeling of more than usual interest that I am including in this paper the quite recent discovery by officers of the United States Public Health Service that typhus fever is carried by one of the species of rat fleas. The story of this discovery demonstrates beautifully the methods and orderly procedure of modern medical research, so well in fact that I feel impelled to relate it to you.

Way back in the dawn of the Twentieth Century, Dr. Brill of New York noticed that some of the cases of typhoid fever coming under his observation presented peculiar and distinctive symptoms. He decided they were of a new disease, which became known as Brill's disease. About this time Dr. Joseph Goldberger, later to become famous as an investigator of pellagra, went to Mexico to study typhus fever. After his return he became impressed with the similarity of the new Brill's disease and the typhus fever he had seen. In conjunction with Dr. J. F. Anderson, he demonstrated that Brill's disease was really typhus.

The vista disclosed by this discovery was at first a bit startling. Here was one of the great epidemic diseases suddenly discovered in our very midst. Study of the situation, however, disclosed that there was something lacking. For one thing, no epidemic occurred, but just occasional cases in New York and a few other large cities. But presently cases were reported from the South, and as years went on these became more and more numerous, until the Public Health Service decided to detail an officer to study them.

Dr. Maxcy, who was put on this study, collected a large amount of data. When this had been assembled and tabulated, three things stood out. One was that the typhus in this country was not associated with lice, which are the known carriers of typhus in epidemics. The

next was that cases were most numerous in the summer and fall, the incidence corresponding with that of a seasonally varying insect. The third was that multiple cases were associated with places of business, not with habitations, and that they were associated with rat infested locations. This last observation was in striking conformity with the association of bubonic plague and suggested a rat ectoparasite as the transmitting agent. Dr. Maxcy was inclined to suspect a variety of rat mite, that is known to bite man as well as rats and which is sometimes very numerous in the South. The possibilities of mites and ticks as transmitters has not yet been fully worked out.

Dr. Maxcy was unable to further pursue these studies, but they were taken up by other Service officers under the direction of Dr. R. E. Dyer. Dr. Dyer suspected the rat flea and when some cases of typhus were reported in Baltimore, had a number of rats trapped at the apparent focus of infection. From these rats were secured a number of rat fleas. These fleas were ground up, mixed with salt solution and injected into guinea pigs. The guinea pigs developed typhus. Since then Dr. Dyer and his associates have proven by many experimental tests that the rat flea, *Xenopsylla cheopis*, will transmit typhus fever from infected rats to healthy ones. Since this same flea will bite man, the occurrence of human cases is readily accounted for. Following the publication of these reports, Drs. Mooser, Castaneda and Zinnser, working in Mexico City, have discovered that many wild rats are naturally infected with typhus. They also have some evidence that rat lice—which do not bite man—may assist in the transfer of infection from rat to rat.

It took many workers to put the pieces together, but now we have the whole picture. We find it shows the rat with another human disease added to the already long list of those which it

* Before Insecticide & Disinfectant Mfrs. Assn., New York.

preserves, and, with the help of its busy little parasites, disseminates.

The particular interest that the discovery has to this gathering, is that now for the first time the rat and an insect parasite of the rat have been implicated as the carriers of a disease that is not only present, but generally distributed in this country. While the incidence of typhus fever is not high, it is constant and extensive. As its occurrence becomes better known it will probably be found in all portions of this country.

Human Diseases of the Rat

LET us now examine more closely the rat. After all this is the animal that is basically at fault. The rat is an associate of man, and probably for this very reason has been selected by nature to carry around a number of human diseases, keeping them in storage until a favorable opportunity for transfer presents itself. At least one of these diseases, bubonic plague, is highly fatal to the rat; others appear to affect it very little, if at all. Some are transmitted by insects and other ectoparasites, others by different mechanisms, in some cases unknown. It is possible—in fact, probable—that the rat is a reservoir of more diseases than we can definitely assign to it at present. To date it has been proven to carry bubonic plague, typhus fever, infectious jaundice, rat bite fever, trichinosis, the dwarf tapeworm, *lamblia intestinalis*, and *bacillus enteriditis*. It is suspected of carrying relapsing fever, tularennia and amoebic dysentery. It may also have a hand in the maintenance of leprosy, and is susceptible to African sleeping sickness.

This list is worthy of more than casual notice. As a list of human diseases carried by a single variety of animal it is remarkable and is certainly unequalled, or even approached, for any other species. Included in it are two major epidemic diseases—plague and typhus—one of them probably the most feared disease in the world, and both found in our quite short list of quarantinable diseases. Infectious jaundice, a highly fatal disease in some parts of the world, is not unknown in the United States. Two of the three intestinal parasites—*trichina* and *lamblia*—are widely distributed in this and foreign countries, while *B. enteriditis*, is the causative virus responsible for untold numbers of cases of intestinal infection. The only rare diseases in the lot are rat bite fever and the dwarf tapeworm. While confirmation of our suspicions as to the rest would greatly extend the list, this is quite unnecessary. As it stands, we find ourselves confronted with a truly formidable array.

The Roles of the Rat Flea

AS may be the case with the rat, it seems probable that rat fleas are concerned in the transfer of more diseases than those with which we at present credit them. We can certainly regard them with suspicion in all the rat diseases involving infection of the blood stream. These are, plague, typhus, infectious jaundice and rat bite fever, as well as several rat diseases to which man is apparently not susceptible. Among the suspected diseases, tularennia, relapsing fever and African sleeping sickness involve blood infection. This is a natural suspicion in view of the blood-sucking habits of the flea. However; to date the fleas have been proven to be the transmitters of only two of these, plague and typhus.

Exactly how the flea injects the virus of typhus is not as yet known, but the precise process of plague transfer has been studied at length. In this disease when the flea ingests infected blood some of the plague bacilli become lodged in the spicules of a peculiar valve arrangement at the entrance to the flea's stomach. They grow there and finally increase to such numbers that they entirely occlude the passage. A flea in this condition is most unfortunately placed. It can bite and even suck blood into its throat, but cannot draw any into its stomach. In a desperate endeavor to satisfy its hunger it constantly bites. If the rat it is on dies, it sets out at once for another rat, or a man if one happens to come along. Established on a new host it promptly starts biting again. Each time it bites it distends its throat with blood. As it relaxes some of this blood is shot back, but mixed with some of the plague bacilli, which are thus injected into rat or man on which the flea has alighted.

There is another possible mechanism of transfer. During the act of biting, fleas frequently deposit feces. Feces from an infected flea are infected, so that if they are scratched into the puncture made by the insect they may cause infection of the host. This is true in the case of typhus fever as well as plague and may be the principal method of transfer of typhus; though insect transfer of disease is usually accomplished by actual injection of the virus.

Ingestion of infected blood, however, is not the only way the flea becomes involved in disease transfer. This will be appreciated at once when I state that rat fleas are essential to the existence and propagation of the dwarf tapeworm. In his case the flea acts as intermediate host, that is, part of the life cycle of the tapeworm takes place in the flea larva. As you probably know, the tapeworms go through a double life cycle, usually one in a large host, the other in a small

host. The small host, the flea larva in this instance, becomes infected by eating the eggs, the large host by eating the small host. When a man is so unfortunate as to eat a flea larva he may take the place of the rat as a home for tapeworms.

Varieties of Rat Fleas

SO far we have spoken rather generally of rat fleas. The term covers a number of varieties of this insect, about ten species having been found definitely parasitic on rats in various parts of the world. Only three species, however, are of world-wide distribution and since one of these, *Leptopsylla musculi*, very rarely bites man it can be put out of the picture. This leaves two to be considered, they are *Xenopsylla cheopis* and *Ceratophyllus fasciatus*. The first of these may be described as the tropical rat flea, the other the rat flea in colder climates, although there exists a rather wide climatic zone of overlapping and a very considerable seasonal variation.

Xenopsylla cheopis is the predominant rat flea in nearly all tropical locations. It is also the predominant rat flea during the summer months in these halves of the temperate zones nearer the equator; roughly its habitat is within the bounds of the north and south 40° parallels of latitude. In this country it is found in considerable numbers in summer as far north as New York and Boston; under special local conditions it may be found at higher latitudes. It is by far the most usual rat flea on ships. It is apparently the rat flea most concerned in the transfer of plague and so far is the only one definitely implicated in the transfer of typhus fever.

Ceratophyllus fasciatus is the rat flea of cold climates and during cold weather in temperate climates. It is quite rare in the tropics except at altitudes high enough to cause cold or cool weather. On ships it is almost confined to those that regularly visit northern ports. In the intermediate zone—in this country that lying between New York and New Orleans—it alternates in predominance with *Xenopsylla cheopis*, appearing in numbers during the cold months, but more or less replaced by the latter during the hot season. It is capable of transmitting plague, but apparently not as effectively as *Xenopsylla cheopis*. It quite probably may transmit other diseases though this has not yet been proven. The occurrence, however, of typhus fever in New York, Philadelphia and Baltimore during the winter is suggestive.

Breeding Habits

LIKE many other insects, the flea passes through a complete metamorphosis. The adult lays eggs which hatch into small worms.

These when full grown spin cocoons wherein they are transferred into fleas. The larva live on small particles of organic matter and usually inhabit rat nests, though not restricted to these.

The adult fleas are, of course, mobile parasites, in fact, quite mobile, and do not remain at all times on the rats. After securing a full meal they are apt to drop off and engage in other pursuits until again hungry, when they jump aboard the first rat presenting. Usually they get off in or near rat nests or harborages. It is while away from the rat that the females deposit their eggs.

Rat Flea Extermination

THE two species we have under consideration differ somewhat in their activities, *Ceratophyllus fasciatus* spending a large part of its time in rat nests and harborages while *Xenopsylla cheopis* spends more time on the rat. From an eradication viewpoint, however, the important fact is that they are closely associated with the rat or the rat harboring places. In this peculiarity rat fleas markedly differ from such species as the dog flea or the human flea which largely breed in sandy soil. Their close association with their hosts links their fates together, the destruction of one being intimately bound with eradication of the other, even though it is appreciated that destruction of the fleas alone would be a great advantage rather than a harm to the rat; destruction of rats alone dooms the rat fleas which must have this host to live. The rat being a greater pest even than its fleas, would certainly not remain unmolested by anyone taking the trouble to dig into rat harborages to kill the fleas, so that in practice any extensive and complete campaign against rat fleas involves a campaign against rats also.

While this is true as to complete eradication of rat fleas, it is not necessarily true of flea eradication in that zone in the immediate vicinity of man, but outside of rat harborages. Some rat fleas drop off in locations outside of the enclosed harborages; when rats die the fleas leave the body necessarily invading the location where death takes place; when large numbers of rats die in a short space of time—as when infected with plague—the sudden decrease in the number of hosts causes the fleas to explore widely in search of food. It will be seen, therefore, that in infested homes, but more particularly in rat infested stores and warehouses, there appear certain numbers of rat fleas on the floors, distributed among articles on the floors or in similar locations, that not only can, but, if they are to be exterminated, must be attacked separately

(Continued on Page 111)

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YOU do not have to change any characteristic odor effect you may have established in your finished product. You merely use from 40% to 70% less of your present perfume in combination with VIOFLOR. If you have no established odor effect, VIOFLOR may be used alone most effectively and economically.

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Stripping for **YOUR** Business!

» » » It's all fine and dandy—this "Institutional Copy" which tells about **CHEMICAL SUPPLY PRODUCTS**—and we hope you like it —

But how about an order?

» » » We have our sleeves rolled up and business is rolling in despite the depression. But it will worry us if some of **YOUR** business is not included because we're dead sure you have read our messages in this magazine for many months.

» » » How about an **ORDER**? You'll look far and long before you'll find a manufacturer who will handle it better. Give us a trial now! We've been in business for 35 years, making Disinfectants, Insecticides and Sanitary Products for the jobbing trade.

» » » Shipments under your own name and brand direct to your customers if you wish.

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Say you saw it in SOAP!

I. & D. M. A. Governors Meet

*Plan Mid-Year Convention for May 23 and 24 at
Edgewater Beach Hotel, Chicago*

A REGULAR meeting of the Board of Governors of the Insecticide & Disinfectant Manufacturers Association was held March 8 at the Hotel New Yorker, New York. At the meeting, it was decided to hold the mid-year convention at the Edgewater Beach Hotel in Chicago on Monday and Tuesday, May 23 and 24. The regular meeting will be preceded by a meeting of the Board of Governors and chairmen of committees at the hotel on Sunday evening, May 22 at 7:00 P.M. W. J. Andree of the Sinclair Refining Co. has been appointed chairman of the program committee for the meeting. General convention arrangements, including reservations, luncheons, banquet, etc.; will be in charge of Secretary Harry W. Cole of Baird & McGuire, Inc., Holbrook, Mass. Grant A. Dorland of Soap will again be in charge of entertainment for the meeting.

After considerable discussion of U. S. Government department bulletins on disinfectants, insecticides, and allied subjects, the Board formulated a request to be presented to the Scientific Committee of the Association that a study be made of bulletins, past and recent, by the Committee and a report on them be made to the Association. The Board also ratified a vote which had been taken by mail from the office of the Secretary on the adoption of a minimum standard for liquid household insecticides and declared the standard officially adopted. The Board also voted to change the fiscal year of the Association from January 1-December 31, to December 1-November 30, so that reports for the year would be available each year in time for the annual convention in December.

A budget covering 1932, the first budget ever considered by the Association, was presented to the Board by President Stone and Treasurer Powell. It was adopted by the Board after discussion.

A RATHER sweeping change in the method for choosing members of the nominating committee and the election of officers of the Association was proposed by President Stone to be laid before the Association at its annual mid-summer meeting in May. The change calls for a

selection of ten names by the Board of Governors at its summer meeting. These ten names are to be submitted to the membership and from which a nominating committee of seven members is to be chosen. This committee will elect its own chairman and will report at the annual meeting on the first day of the meeting. This system differs from the one now in use in which the nominating committee is chosen from the floor of the convention on the first day of the annual meeting. Under the new system, the election of officers will be by written ballot only at the annual meeting. The change in the nominating and election method was adopted unanimously by the Board for submission to the membership.

Various committee chairmen will be requested by the Secretary to prepare their semi-annual reports and have them in his hands at least two weeks prior to the Chicago meeting. It was also the feeling of the Board that in making up the program for the Chicago meeting that suggestions of members for speakers or topics to be discussed should be sent at as early a date as possible to W. J. Andree, chairman, care of the Sinclair Refining Co., 45 Nassau Street, New York. An appropriation for entertainment was also voted by the Board for the Chicago meeting.


In order that the national scope of the Association might be apparent from the name of the organization, it was suggested that the name of the Association be changed slightly to include this word—National Insecticide and Disinfectant Manufacturers Association. This suggestion was acted upon favorably by the Board and the proposed change will be submitted to the membership.

Those who attended the Board meeting included Evans E. A. Stone, president, William Peterman, Inc., New York; John Powell, treasurer, John Powell & Co., New York; Harry W. Cole, secretary, Baird & McGuire, Inc., Holbrook, Mass.; Peter Dougan, vice-president, Merck & Co., Rahway, N. J.; H. W. Hamilton, Koppers Products Co., Pittsburgh; Dr. Robert C. White, Robert C. White Co., Philadelphia; Dr. Charles H. Peet, Rohm & Hass Co., Philadelphia; C. P. McCormick, McCormick & Co., Baltimore.


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*Coal Tar Chemi-
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**SOAP and
DISINFECTANT
INDUSTRY**


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CHEMICAL CO., Inc.

Merchants Bank Bldg.
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They Sell...
because they
Kill...

In the final check-up, an insecticide is only worth its salt in terms of **KILLING POWER** and **CONSISTENCY OF TOXIC STRENGTH**. Hopkins' Physiologically Tested Insecticides answer these specifications in a way that keeps sales volume continually on the rise. We invite you to check up for yourself.

HOPKINS' *Standardized*
Physiologically Tested
PYRETHRUM
PRODUCTS

*Made from Closed Dalmatian Insect
Flowers*

Open or half-open flowers necessarily lose a good deal of their active principles through the action of the elements. To assure yourself of pure Pyrethrum products with the highest run of consistent killing strength, standardize on **HOPKINS' PYRETHRUM PRODUCTS**. They are made from highest-testing Closed Dalmatian Flowers. Fine powdered, for dusting; in granulated form for percolation.

Quotations, samples—on request.

HOPKINS' *Oven-Dried*
Physiologically Tested
RED-RAT-SQUIL

(TRADE MARK)

Consistently, this powerful Hopkins' rodenticide shows a toxic power considerably in excess of the fatal dose standards commonly accepted for red squill powders. Uniform in strength, Hopkins' Red-Rat-Squill is a poison *specific to rats and mice*, and completely harmless to human beings and domestic animals.

Write for descriptive literature and prices.

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Exterminators Re-elect Goldey

At a meeting of the Society of Exterminators and Fumigators of New York, held March 8 at the Knights of Columbus Hall, Edward N. Goldey, Bliss Exterminating Co., was re-elected president of the association. Other officers chosen were M. Horowitz, Excelsior Exterminating Co., vice-president; Frank Rausch, Empire Exterminating Co., treasurer; and Irving Josephson, Josephson Disinfecting Co., secretary. Approximately fifty members attended the March 8th meeting. Among the topics discussed at the meeting were the newly adopted additions to the sanitary code of New York City. Other topics of discussion were the contemplated membership drive for the coming year and a program of co-operative advertising.

Introduce N. Y. Insecticide Bill

A bill has been introduced in the New York Senate, No. 721 by Mr. Campbell, as an amendment to the agriculture and markets law in relation to agricultural poisons. The bill covers somewhat the same ground as one proposed by Senator Kirkland, but will be somewhat more pleasing to household insecticide manufacturers, as it applies only to agricultural insecticides. The license fee provided for is only \$5 as against \$10 in the Kirkland bill. A further difference is that the Campbell bill allows the manufacturer the option of declaring the active or inert ingredients of his product, while the Kirkland bill provides that both shall be stated.

Harold R. King, associated with the New York crude drug trade for several years, announces the organization of Crude Drug Importers, Inc., with offices at 123 William St., New York. The new company will import various drug products with which Mr. King has been particularly familiar, including pyrethrum. The company's telephone number is BEekman 3-7597. Mr. King's first connection in the New York market was with McLaughlin, Gormley, King Co. as branch office manager from 1922 through 1926. In 1927 the firm of King & Howe was formed, also to deal in crude drugs. For the past several months Mr. King has been connected with United Chemical & Drug Corp., which concern took over the King & Howe business.

The Lambert Co. reports for the year ended December 31, 1931, consolidated net profits, after taxes, of \$6,143,129. This is equivalent to \$8.20 per share on the 748,996 shares of capital stock outstanding. Consolidated net profits for the year 1930 were \$7,132,412, equivalent to \$9.52 per share on the same number of shares.

Define "Antiseptic" in B. & M. Case

A recent decision in the litigation instigated by the U. S. Food and Drug Administration involving B. & M., an external remedy marketed by F. E. Rollins Co., brings out the District of Columbia Court's interpretation of the meaning of "Antiseptic." The government's charges were that the product was adulterated and misbranded because false and misleading statements appeared in the circular and booklet accompanying each bottle.

The adulteration claimed by the government was that the product is described as an antiseptic although it is not in fact an antiseptic, and reliance was placed on the statement in the food and drugs act that an article is misbranded if its strength is below its professed standard or quality. The judge declared that the word, "antiseptic," does not of itself convey the idea of any particular strength or degree, pointing out that it is not the equivalent of "germicide" and that it was in use prior to the discovery of bacteriological activity. He said:—

"To say that a substance is "antiseptic" is merely to affirm that it has a tendency to prevent putrefaction, decay, or the development or increase of bacteria; and not to affirm any particular potency in connection therewith. . . . If the drug does not profess a particular standard of strength or purity, it is not "adulterated" by reason of a falsely asserted quality, which would be a "misbranding" under the act. The claim that the drug is "antiseptic" is a profession of quality rather than of strength of purity."

The case will go to trial shortly on the basis of the alleged false and fraudulent claims included in the booklet. The Rollins Co. also attempted to have this basis of action stricken out, but was unsuccessful. On this point the government charged that false and fraudulent statements are contained in the booklet knowingly or in reckless and wanton disregard of their truth or falsity. The manufacturer claimed that this charge was defective in that it should be "knowingly and in reckless and wanton disregard of their truth or falsity." The judge said that use of the word, "and," instead of "or" would have been preferable, but he upheld the charge on the ground that if it could be proved that false and fraudulent statements were made knowingly there would be sufficient proof to sustain the libel.

In a recently patented antiseptic and deodorizing solution, an orthodichlorobenzene solution of paradichlorobenzene is mixed with crude cresol, camphor oil and sulfonated oils to the stage of an emulsion. Jap. Pat. No. 90,826.

COST COUNTS

Can you under present conditions afford to pay an excessive price for your Perfume?

COST PER GALLON	
Oil Bouquet "IT"	"Sensation" FYSY
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Oil Bouquet 3332	3332
Oil Bouquet PECO	ESCO
Oil Bouquet B. L. S.	New Mown Hay
Oil Bouquet ROSECO	

Competition is too keen. Well: what can you pay? Look over this cost chart, select your limit in price, then send for samples. We guarantee that in any event the Perfume you choose will do the work most efficiently at the price.



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PASTOXINE

Created by Pasteur Vaccine Laboratories and Subsidized by French Government

PASTOXINE, a non-poisonous raticide in jelly form is the result of fifty years' scientific research by this great laboratory founded by Louis Pasteur, one of the greatest benefactors to mankind the world has ever known.



Only Product in World Deadly to Rats and Absolutely Harmless to Humans, Domestic Animals and Poultry

PASTOXINE is the only product in the world deadly to rats and mice (less than 2 grains of it kills a rat) and yet *absolutely harmless to humans, domestic animals and poultry.* (The U. S. Bureau of Animal Industry confirms this statement by approving PASTOXINE as not misbranded.) PASTOXINE is made by a formula heretofore unknown to the scientific world . . . contains no Phosphor, Baryta or mineral poisons whatever. It is most attractive to rats and mice but absolutely repulsive to domestic animals. Professor Doughty of Amherst College proved in a recent test that dogs and cats starved for three days will not take PASTOXINE.

6 Times More Effective than Any Other Known Rat Killer

One pound of PASTOXINE baits approximately 2500 rats. Tests prove that 1 oz. kills 42 pounds of rats . . . the best competitive raticide (which, however, is not absolutely harmless to domestic animals and poultry) kills only 7 pounds of rats. PASTOXINE is the only product in the world which can be depended upon for absolute rodent control.

Testimonials on File from

City of Springfield, Mass.; Board of Health, New York; U. S. Naval Medical Schools; Hagenbeck Circus; Eastern States Milling Corp.; State of North Carolina Home Economics Division, etc. . . . In a recent test made in Central Park, New York, in which 50,000 baits were laid—18,000 rats were killed in a single night.



Sole American Distributors to Industrial Trade
U. S. SANITARY SPECIALTIES CORPORATION

435 So. Western Ave.

Chicago, Ill.

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Sweeping Compound Specifications

(From Page 97)

for bids shall respectively form a part of this specification.

H-1a. Army. United States Army Specification No. 100-2, Standard Specification for Marking Shipments.

H-1b. Navy.

H 1b (1). Navy Department General Specifications for Inspection of Material (copies of which may be obtained without cost upon application to the Bureau of Supplies and Accounts, Navy Department, Washington, D. C.).

H-1c. Marine Corps. Instructions issued by the Quartermaster.

I. Notes.

I-1. It is believed that this specification adequately describes the characteristics necessary to secure the desired material, and that normally no samples will be necessary prior to award to determine compliance with this specification. If, for any particular purpose, samples with bids are necessary, they should be specifically asked for in the invitation for bids, and the particular purpose to be served by the bid samples should be definitely stated, the specification to apply in all other respects.

I-2. This specification governs all United States Government purchases of this commodity. Users are requested to retain this specification in permanent file until a revision is issued.

I-3. Interested parties are advised that an Alphabetical Index of Federal Specifications may be purchased as noted in the paragraph next below, price to be obtained from the Superintendent of Documents.

I-4. Copies of this specification may be obtained upon application, accompanied by money order or coupon, or cash, to Superintendent of Documents, Government Printing Office, Washington, D. C.

NOTICE: When Government drawings, specifications, or other data are used for any Government procurement operation, the United States Government thereby incurs no responsibility or any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Calkins Heads Rochester Chamber

Daniel N. Calkins, president of the Rochester Germicide Co., Rochester, N. Y., who was recently elected president of the Rochester Chamber of Commerce for 1932, has been widely



D. N. CALKINS

known in the disinfectant industry for the past thirty-five years. He has been an active member of the Insecticide & Disinfectant Manufacturers Association since its formation in 1914. Mr. Calkins was born in Genesee County, New York State, on November 4, 1865. In 1885, he moved to Rochester and remained in the employ of a large department store there until 1891 at which

time, he went into the manufacture of shoes. In 1897, he formed the Rochester Germicide Co., Inc., taking over a small local business in automatic disinfecting appliances. He has been the active head of the business since that time, building it into an organization of national scope and expanding into the full line of sanitary supplies. He has been active in the affairs of the Rochester Chamber of Commerce since 1908, holding various offices from time to time, and this year being elected president. He has been active in social and religious work in Rochester. He was president of the Rochester Y. M. C. A. for two years and also president of the State Federation of Churches for the same length of time. He resides in Rochester and has a summer home in the Thousand Islands.

Household disinfectants, deodorants, germicides and similar preparations, to the amount of 149,239 lbs., worth \$12,311, were exported from United States during December, 1931. This compares with 221,677 lbs., worth \$16,963, in December, 1930. Total exports throughout 1931 amounted to 2,439,875 lbs., worth \$283,070, comparable to 2,304,164 lbs., valued at \$289,407, in 1930.

The Food and Drug Administration is attempting to fix fines under the Food and Drug Act at \$1,000 maximum for first offense and \$1,000 minimum for second offenses.

S. H. Bell of the Koppers Products Co, Pittsburgh, returned to his office on March 1 after a severe illness which had confined him to his home for several weeks.

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there is no substitute for the NU DAY SPRAYER



IN 1927 Lowell gave to the Insecticide Trade the Nu Day Sprayer, the use of which has made for the success of all Insecticide Manufacturers. It is a patented sprayer and while there have been imitations, no one has approached the Nu Day in efficiency and correct design.

*Correct Application of Insecticide
Is the Difference Between
Success and Failure*

LOWELL MANUFACTURING CO.
LOWELL MICHIGAN, U. S. A.

LETHANE 384

The PHYSICAL PROPERTIES of an insecticide play a large part in its acceptance by the trade.

LETHANE 384 insecticides are non-staining, practically water-white in good quality solvents, and leave no residual odor.

Röhm & Haas Co., Inc.

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Philadelphia, Pa.

Say you saw it in SOAP!

Sanco Products Co., Inc., Greenville, Ohio, is the new name of the Sanitary Supply Co. of that city, according to an announcement by Louis Holzapfel, Sr., president of the firm. The organization has been operated for 22 years under the old title, but with its incorporation recently adopted the name Sanco Products Co. The company has just issued an elaborate illustrated catalog of its products.

Zonite Products Corp. has acquired by stock transfer the business of Annette's Perfect Cleanser Co., Boston, manufacturers of a powder for removing stains from silk.

Nycco Products Corp., insecticides, occupied new and larger quarters at 120 W. 29th street, New York City, on Feb. 1.

Monsanto Chemical Works and subsidiary companies show consolidated net profits for 1931, after all charges and taxes, of \$1,280,783, or \$2.98 per share on the no par capital stock, compared with \$732,684, or \$1.70 per share for the year 1930.

International Combustion Tar & Chemical Corp., which has been in receivership for the past two years, has been purchased by P. C. Reilly, Reilly Chemical Co., Indianapolis.

John S. Norton assumed the duties of vice-president in charge of sales of Lambert Pharmaceutical Co., St. Louis, March 1. He will make his headquarters in St. Louis.

TULSITE Chemical Products Co., a newly organized concern located in Tulsa, Okla., recently started operations in its new plant, which is equipped for the manufacture of soaps and cleaning compounds. For the present the company is confining its attention to the manufacture of industrial bulk soaps. The Tulsa location puts the company in close contact with an abundant source of supply of tallow and grease, and also gives it access to the southwestern market which has not received extensive attention in the past from manufacturers of soaps and cleaning compounds. A. H. Flaherty, a Tulsa resident, is president of the company, and his son, Allen H. Flaherty, is associated with the concern as secretary. Andrew J. Ospering serves

West Wins Step in Infringement Case

The United States Circuit Court of Appeals for the Third Circuit, Philadelphia, has reversed an order of the district court, vacating a pro confesso decree and injunction against Dunbar A. Rosenthal in a counterclaim by the West Disinfectant Company, in a suit alleging infringement by the company of a patent owned by Rosenthal.

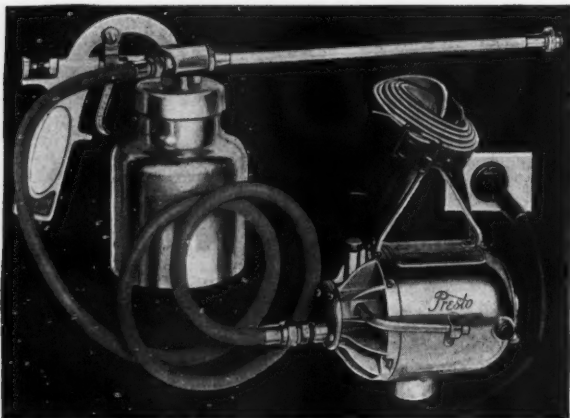
The original Rosenthal suit on allegations of infringement was brought September 23, 1930. The West Disinfectant Company's answer and counterclaim were filed October 22, 1930, copies being sent to the counsel signatory to the Rosenthal bill. No reply was filed by Rosenthal, and a pro confesso decree against him was entered February 3, 1931.

Rosenthal, setting up that he had not been properly notified of the counterclaim action, moved, March 31, 1931, that the pro confesso decree and subsequent injunction be stricken out. This motion was granted April 17, 1931. The West Disinfectant Company appealed. In reversing the vacating decree, the circuit court held that the notice of the counterclaim given Rosenthal's signatory counsel was sufficient, although no direct notice had been given his local counsel of record.

U. S. Bottlers Machinery Co., Chicago, has issued a new section of its filling machinery catalog, illustrating and describing washers and dryers, filling machines, cappers and corkers, filtering equipment, conveying systems, and storage and mixing tanks.



as vice-president and general manager, and John H. Black has been employed as soap chemist.



Presto Model 88-94 Shoulder Strap Electric Spraying Unit

New-Presto Model 88-94 Shoulder Strap Electric Spraying Unit

The powerful, effective spraying unit for all Insecticides—Disinfectants—Moth Killers—Deodorants

THIS new Presto Electric Spraying Unit is especially designed for the larger users—hospitals, industrial plants, dairies, poultry farms, packing plants, and similar places where quick, effective spraying is a necessity.

Two unit design includes *rotary compressor* of ample capacity carried on a shoulder strap—relieving the operator's hands of excessive weight. The Presto spray gun has a 12-inch extension nozzle, giving added reach and making inaccessible corners easy to cover. Convenient adjustment varies the spray instantly from heavy wet spray to a finely atomized mist that will float in the air. Any operating condition can be met, conveniently and economically.

Presto spraying equipment increases the sale of liquid disinfectants and insecticides of all kinds. Thousands of the famous Presto Model 102 spray guns are in use. Try a Presto spraying unit. You will find them far ahead of the ordinary types previously available. Recommend or furnish Presto equipment to your customers and earn an extra profit on increased sales of materials. The Presto plan is a proved business getter. Send the coupon now and get full information.



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Write us about your requirements and we will gladly submit samples and prices without any obligation on your part.

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The Rat Flea as Disease Carrier

(Continued from Page 101)

from the rats. These are the fleas, of course, that are an immediate menace to man; those on the rats or inside enclosed harborages constitute a potential menace, that becomes real only when they in turn invade man's immediate surroundings or when man invades their strongholds, either through handling rats or digging into rat harborages.

A discussion of the materials used to destroy rat fleas is not within the scope of this paper. The Public Health Service at present confines rat flea extermination to ships where it is incidental to the destruction of rats by fumigation. Sometimes in anti-plague campaigns conducted in cities it becomes necessary to extensively invade rat harborages; in such instances free fleas are destroyed by spraying a kerosene and soap emulsion. They can be killed by gasoline fumes. In general, it may be said they are distinctly more susceptible to insecticides than are many other insects.

Before concluding, a brief word as to other rat parasites may be in order. In addition to fleas it is common to find rats infested with mites and lice. The mites may be of several species, but the lice are practically always *Polyplax spinulosa* which infest only rats and closely related species of rodents. Most of the mites refuse to bite man, but one, *Liponyssus bacoti*, widely disseminated in the Southern States, not only bites man, but may become a serious pest. Either mites or lice may occur on rats and about rat harborages in tremendous numbers.

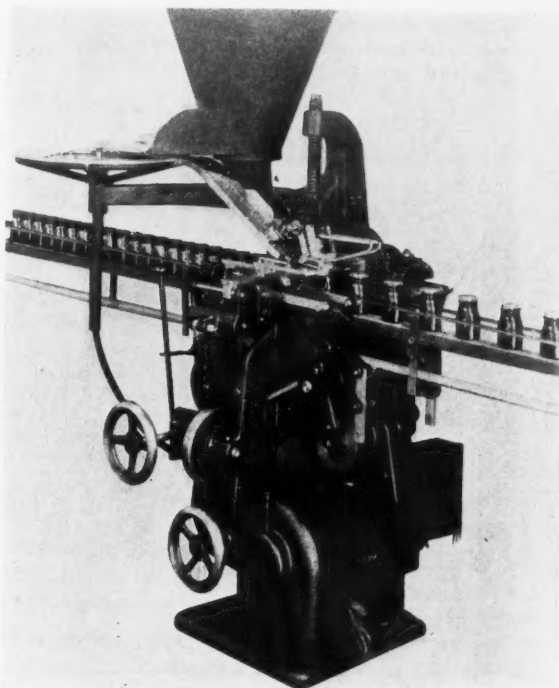
Conclusion

THE problem presented to us by the activities of the ectoparasites of the rat, and particularly the rat flea, is a serious one. The plague-carrying proclivities of the flea, alone, have cost prodigiously. Now we are confronted with still further activities of this insect as well as by those of its confreres, aids and abettors, rat lice and rat mites. As long as only plague was threatened, the problem could be left to those appointed to control this disease, but when we find a tremendous reservoir of other diseases among rats, with a host of parasites standing by to pass them on to all of us, the concerted efforts of all concerned are required to solve it.

Exports of household insecticides and exterminators from United States during December, 1931, totaled 281,932 lbs., worth \$64,362, as compared with 495,425 lbs., worth \$139,106, in the closing month of 1930. Total exports in 1931 were 7,355,168 lbs., worth \$2,184,841, as against 12,318,734 lbs., valued at \$3,788,975, during 1930.

Williams Offer New Capping Machine

Williams Sealing Corp., Decatur, Ill., makers of Kork-N-Seal caps, announce the development of a new straight line automatic capping machine for applying Williams seals to bottles and cans. The speed range of the new machine is



from 60 to 125 packages per minute. The model illustrated has a speed of 65 per minute and applies three sizes of caps to four sizes and shapes of bottles. Adjusting time to change from one container to another is fifteen minutes, this flexibility being indicated as one of the machine's principal features. In addition, the equipment eliminates all strain from the body of the container during capping, doing away with breakage and permitting the use of liners of greater density.

The annual convention of the Associated Chain Drug Stores, held early in February, was a sea-going convention, several of the sessions being held on board the *S. S. Monarch of Bermuda*, en route to Hamilton, Bermuda. Upon arrival in Hamilton, the 200 conventionites shifted the scene of their activities to the Hotel Bermudiana. The cost of the trip, including every expense, was \$135 per person, considerably under the ordinary rate. Those attending were enthusiastic over the combined ocean voyage and convention.

A small soap plant has been installed in the packing house of the Fergus Co-Operative Packing Company, Fergus Falls, Minnesota.

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The primary purpose of The Entomological Testing Laboratories, Inc., is to make available to the insecticide manufacturer a testing service devoted wholly to insecticides.

Entomological testing by the Peet-Grady and other methods, and complete chemical examination of insecticides are now available.

We invite the cooperation of manufacturers to make this laboratory a useful adjunct of the insecticide industry.

Charges are moderate, and our completely equipped and expertly directed Laboratory is at your disposal.

ENTOMOLOGICAL TESTING LABORATORIES, INC.

114 E. 32nd Street

New York, N. Y.

Say you saw it in SOAP!

Coconut Oil

(Continued from Page 33)

set the price of domestic butter are first, the price of foreign butter plus the duty and second, the rate of domestic butter production. If the production of domestic butter is below domestic requirements, the price of butter tends to advance to the cost of foreign butter delivered to New York, plus the duty of 14 cents per pound. If the production of domestic butter exceeds the domestic demand, then the competition between domestic butter producers and their efforts to dispose of their surplus production results in the price declining below the duty paid New York price of foreign butter, as is the case now.

A pound of the average grade of nut margarine contains only .53 pound of coconut oil. If, therefore, the oil cost were increased by a duty of 2 cents per pound it would be equivalent to increasing the cost of each pound of margarine 1.06 cent. Allowing 10 per cent profit on this additional cost, a pound of nut margarine would then cost 1.16 cent more than at present, an amount insignificant in comparison with the spread which now and always has existed between butter and margarine. For years this price difference has been from 15 to 26 cents per pound as noted in an accompanying chart. The average price difference over the ten-year period charted has been 21.9 cents per pound. If the average price differ-

ence of 21.9 cents per pound can be reduced only approximately 1 cent with a tariff inflated coconut oil price, it is indeed difficult to see how the dairyman has anything to gain from the placing of such an impediment on the importation of Philippine coconut oil.

Summary

WHETHER the Hare Bill, as amended, or the Hawes-Cutting Bill, were adopted, the injury to the American coconut oil crushing industry of the Philippine Islands would be irreparable. Coconut oil offers no avoidable competition in the dairy fields or other channels where it is used. It cannot be replaced by American produced fats or oils. Any limitation on imports of the oil would result in a comparable increase in the imports of copra. In either case, there would be absolutely no appreciable benefits to American agriculture or dairymen. The foundation upon which the claims of damage to the American farmer by Philippine coconut oil imports are based, is in reality a false foundation inasmuch as it is made up of numerous false claims which ignore completely the technical aspects in the use of coconut oil and its lack of interchangeability with other oils or fats. The only results of these bills would be to damage the crushers in the Islands and to raise the price of coconut oil to the American soap manufacturers and other consumers two cents per pound.

You Can't be the First — But why be the Last?

to cut costs and improve the odor appeal of your

SOAPS, CREAMS, POLISHES, CLEANERS, etc.

Lemenone—Has a delicate lemon-lime odor.

Lemenone Crude—Has a strong lemongrass-like odor.

Clovel—Has a strong clove odor.

Price Schedule (f. o. b. New York)

	375 lb. drums	35 lb. cans	7 lb. trial cans
Clovel	20c lb.	25c lb.	30c lb.
Lemenone	30c "	35c "	40c "
Lemonone Crude	25c "	30c "	35c "

Order a trial 7 lb. can—if you are from Missouri.

GLYCO PRODUCTS CO., INC. BUSH TERMINAL BLDG. No. 5
BROOKLYN, N. Y.

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Finer Atomization With



THE
NEW

TORNADO Compressor Type Electric Sprayer

A leader for years in the manufacture and sale of Portable Electric Sprayers, Breuer has maintained an enviable position by keeping step with the needs of the insecticide trade.

Now, the new TORNADO Model 53, illustrated, is ready for your inspection and use—greater power, finer atomization with new, positive pressure compressor construction, a beautiful custom-built job guaranteed to please your customers—complete, new design and operation—compact, self-contained, one hand unit—positively the most economical and efficient modern method for applying insecticides, disinfectants and germicides. Just the speedy, efficient, all-purpose unit you have always wanted to stimulate business.

The first manufacturer to see and use this new spray performance ordered 180 units immediately! Let us send you sample on free trial so that you too may use and inspect this unit. No obligation. Write us today for complete information.

New Features You'll Like!

- 1—Not a blower type incorporates a real air compressor fan unit.
- 2—Positive pressure compressor operation atomizes insecticides into finest smoke mist obtainable.
- 3—A real, self-contained, one-hand unit.
- 4—Compact, all aluminum construction with quart container.
- 5—No shoulder straps or hose to trouble.
- 6—Powerful $\frac{1}{4}$ H.P. G.E. Universal Motor.
- 7—Weight only 4 pounds.
- 8—Just plug in—instant operation.
- 9—Fastest, finest insecticide atomization obtainable.

We also make Model 6 Tank Type and Model 50 Blower Type Sprayers—leaders for years.



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A FORMULA

A definite formula is followed in the designing of Hudson Sprayers. This formula involves the length and diameter of the pump. Another "ingredient" is the diameter and lift of the syphon tube. Still another is the gauge of the hole in the pump end. And there are many other factors.

But these are details. The important thing is that the Hudson formula was worked out largely from ideas and suggestions submitted by leading insecticide manufacturers, working in close harmony with Hudson engineers.

Such a formula, kept up to date and revised when revision means improvement, must be close to right. A sprayer, designed on that basis, for your particular insecticide, must be close to solving your problem.

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MANUFACTURING CO.

589 E. ILLINOIS ST.
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Portuguese statistics indicate imports of insecticides and allied preparations during 1930 at 91 metric tons as compared with 57 tons in 1929. The United States furnished half the 1930 receipts. It is understood from trade sources that a large share of the imports of the United States was composed of fly spray while the materials imported from Great Britain, France and Germany consisted of basic chemicals, powders, and pastes used for household and agricultural insecticides. In addition to the imported fly sprays there are several domestic brands on sale in Portugal, three of which are manufactured in Lisbon.

The Essential Oils of Reunion

(Continued from Page 30)

avorable conditions in certain sections of the Island. The progress of this essential oil distillation activity is amply demonstrated by the gradual increase in vetiver oil exports from 4,069 pounds in 1913 to 32,893 pounds in 1928, notwithstanding a marked decline in shipments during 1930. As in the case of geranium oil, exports of vetiver oil are destined principally for France, with small but diminishing direct shipments to the United States.

The production of ylang ylang oil in Reunion has fluctuated considerably from year to year, but in general has declined in relative world importance in view of the lower cost of labor and more favorable climatic conditions existing in Madagascar, Nossi-Be, Mayotte, and the Comoro Islands. Since the plants suffer considerably from high winds, the rather frequent cyclonic disturbances visiting Reunion have adversely affected plantations of *Cananga odorata* on the Island and turned the attention of Bourbon producers of essential oils to a greater specialization and development of the hardier and more easily cultivated vetiver grass and geranium. Although France is the principal direct purchaser of Bourbon ylang ylang oil, the United States and Great Britain are increasing in importance as export markets. Direct shipments of ylang ylang oil to the United States increased from 447 pounds valued at \$1,304 in 1926 to 3,613 pounds worth \$9,205 in 1930.

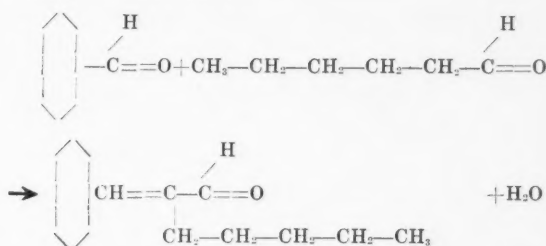
Castor Oil As An Aromatic Base

(Continued from Page 73)

can be readily reconverted into heptaldehyde by the simple expedient of steam distillation.

When treated with phosphorus pentachloride, dichloroheptane is formed (24), which is the starting reaction in the preparation of methylheptene-carbonate, a useful chemical in the perfume industry (34). Heptaldehyde combines

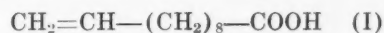
with sodium bisulphite (10) to form the usual bisulphite addition product, of use in its purification. Heptaldehyde gives the usual red to violet coloration with fuchsin-sulphurous acid (25). At reduced temperatures, in the presence of water, colorless crystals of the hydrate slowly separate (31). With benzaldehyde, heptaldehyde condenses to form alpha-amyl-cinnamic aldehyde (49) (50):



which has been attracting a great deal of attention in the aromatics industry during the past few years. It is frequently referred to as Jasmin Aldehyde.

These are only a few of the properties of heptaldehyde, and are intended to merely indicate in a very general way some of its uses and possibilities. Others may be obtained from the literature or may be inferred from its chemical nature.

Undecylenic Acid:—Undecylenic acid is commonly given the structural formula



That is, the double bond is considered to be located between the tenth and eleventh carbon atoms. There are, however, some evidences—such as its splitting with caustic potash into acetic acid and nonoic acid (37)—which indicate the structure:



that is, with the double bond between the ninth and tenth carbon atoms (see also 54). The probabilities are that undecylenic acid exists in two (perhaps more) isomeric forms, or that the position of the double bond is shifted by treatment with certain reagents. As will be noted presently, treatment with strong sulphuric acid apparently shifts the double bond to the position between the third and fourth carbon atoms. Hence, it is difficult to write a definite structural formula. For most purposes the structure (I) may be accepted. It may be well to call attention to the fact that such questions regarding the position of a double bond in unsaturated fatty acids frequently occur. Some may question the structure which we have assigned the glyceride of ricinoleic acid for the same reason. We have attempted to indicate the one which appears to be most generally accepted, but here again the

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at Any Price*

Tin sprayers that sell for a few cents each, compressed air sprayers, bucket sprayers, trombone sprayers, electric sprayers from the smallest cup gun units up to outfits of 10 cu. ft. of air per minute. Only Sprayit offers a sprayer for every purpose.

Each sprayer from the smallest to the largest, in design, construction and operation reflects the experience gained in building the thousands upon thousands of high quality SPRAYIT paint sprayers that are in use throughout the world. Building equipment for the correct and economical atomization of materials is our business and we know that business thoroughly.

Our production facilities and the completeness of our line enables us to offer the highest quality sprayer at prices that will prove attractive to you.

We will be glad to submit samples to responsible organizations and to consult with them on their spraying problems.

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**SEND FOR
NEW
32
CATALOG**

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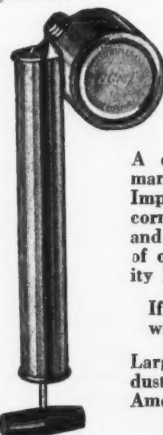


—when Spraying Materials Require BETTER Sprayers

To the makers of spraying materials that require utmost accuracy of atomization, this Superbilt ACME Combination Sprayer is especially recommended. The important feature, a new Air Regulator, provides a wide range of accurate nozzle adjustments to accommodate any demand from a heavy spray to the finest fog. This

ACME Superbilt Combination Sprayer

—may provide the "lucky combination" which will insure your product greater popularity and a greater profit for you. Its uses are many. It is of superior adaptability for fly spray, floor oil, insecticides, etc. Very strongly made of heavy sheet steel, size 6¼ x 13, riveted and soldered. Capacity 1½ gallons.



ACME Insecticide Sprayer No. 370

A decidedly BETTER sprayer designed primarily for fly oils and household insecticides. Improved syphon tube permits spraying up into corners and on ceiling. Exceptionally effective and very popular. See catalog for description of other superior points. Size 1½ x 10, capacity 12 ounces.

If ACME hasn't the sprayer you want, we will make one to fill your needs.

Largest exclusive manufacturers of sprayers, dusters and hand corn and potato planters in America. Catalog and prices upon request.

Potato Implement Company

Traverse City

Michigan

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actual position is doubtless influenced by conditions.

In the pure state, undecylenic acid is a crystalline solid melting at 24.5°C. (38). Its boiling points at various pressures are approximately as follows (37) (38) (39) (40):

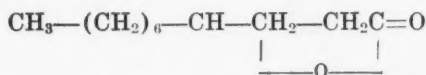
760 mm.	275-295°C.
130 mm.	230-235°C.
100 mm.	214°C.
90 mm.	199°C.
15 mm.	165°C.

The spread in boiling points at the higher pressures indicates that the acid tends to decompose at these higher temperatures. Hence, one should not attempt to distill undecylenic acid except at relatively low pressures—certainly under 100 mm. These data are taken from the literature and the writers do not believe them to be very satisfactory. This is due, no doubt, to the difficulty of obtaining absolutely pure undecylenic acid and to its unstable nature. They are the best data we have available at the present time. The vapor pressure—temperature curve shown in Figure 2, is intended only as a rough approximation, but may prove of some use. The divided broken portion indicates that decomposition takes place over this range. The specific gravities are given in the literature (40) (41) as follows:

At 24°C. compared with water at 4°C.	0.9072
At 25°C. compared with water at 25°C.	0.9102
At 45°C. compared with water at 45°C.	0.8993
At 9.9°C. compared with water at 4°C.	0.8653

Because of its unsaturated nature, undecylenic acid polymerizes slowly at elevated temperatures (39) (42). When oxidized with fuming nitric acid or chromic acid, sebacic acid is formed (37) (43) (44) (55). Oxidation with permanganate is complicated leading to oxy-acids, oxy-ketonic-acids and sebacic acid, depending upon temperature and other conditions (43) (45). It absorbs bromine forming dibrom-undecylic acids (37) (38). Treatment with hydrogen bromide similarly gives brom-undecylic acid (46).

From the standpoint of the aromatics industry one of the most important reactions of undecylenic acid is that with strong sulphuric acid which leads to the formation of gamma-undecalactone (34) (47). The following structural formula has been assigned to this substance:



Undecalactone has a pleasant peach-like odor, is commonly known as peach aldehyde or peach lactone. It boils at 170°C. at 17 mm. Also, the methyl and ethyl esters of undecylenic acid possess peach-like odors.

Summary:—We have thus attempted to briefly review the subject of pyrogenic decomposition of castor oil and indicate a few of the products obtainable therefrom, with particular reference to their relation to the aromatics industry. By way of summarizing, these relations are expressed graphically in Figure 3.

BIBLIOGRAPHY

- (1) Bussy, *Compt. Rendus* 21, 84; *Annalen*, 60, 246.
- (2) Florsheim, D.R.P. 167, 137; *Centralblatt*, 1906 I, 796.
- (3) Städeler, *Journal Praktische Chemie*, (1) 72, 242.
- (4) Haller, *Compt. Rendus*, 144, 466.
- (5) Scala, *Centralblatt*, 1898 I, 439.
- (6) Krafft, *Berichte*, 10, 2035; *Berichte* 15, 1717.
- (7) Jourdan, *Annalen*, 200, 102.
- (8) Erlenmeyer, *Sigel, Annalen*, 176, 342.
- (9) Schiff, *Zeitschrift für Chemie*, 1870, 77.
- (10) Bertagnini, *Annalen*, 85, 279.
- (11) Adams & Meuser, U. S. Pat. 1,697,337, Jan. 1, 1929.
- (12) Perkins, *Soc. 45*, 477; *Soc. 43*, 67-69-80; *Berichte*, 16, 1029-1033.
- (13) Kahlbaum, *Siedetemperatur und Druke* (Leipzig 1885) page 92.
- (14) Bruhl, *Annalen*, 203, 28.
- (15) Schlotterbeck, *Berichte*, 40, 481.
- (16) Semmler, *Berichte*, 42, 1161.
- (17) Grimshaw, *Schorlemmer, Annalen*, 170, 141.
- (18) Fournier, *Bl. (4) 5*, 921.
- (19) Tilley, *Annalen*, 67, 109.
- (20) Hell, *Kitrosky, Berichte*, 24, 983.
- (21) *Organic Syntheses*, Vol. VI, page 52.
- (22) Perkin, *Berichte*, 15, 2803; *Berichte* 16, 210.
- (23) Williamson, *Annalen*, 61, 39.
- (24) Limpricht, *Annalen*, 103, 81.
- (25) Schiff, *Compt. Rendus*, 64, 182.
- (26) Bruylants, *Berichte* 8, 415.
- (27) Vandenberghe, *Centralblatt*, 1904, II, 870.
- (28) Ohta, *Biochem. Z.*, 59, 183-187.
- (29) Franke, *Wozelka, Monatsh.*, 33, 349-362.
- (30) Levene, *Taylor, J. Biol. Chem.* 35, 281-283.
- (31) Noorduy, *Rec. Trav. Chim.*, 38, 344-350.
- (32) Kunagawa, *Biochem. Z.*, 123, 225-230.
- (33) Stelzner, *Literatur Register der Organischen Chemie*.
- (34) Viard, *Les Parfums de France* (1925); No. 23, 3-5; No. 24, 33-34.
- (35) Melis, *Annalen*, V, CLXXXV, 358.
- (36) Cross, *Chem. News*, 35, 250.
- (37) Beker, *Berichte*, 11, 1412-1413-1414.
- (38) Kahlbaum, *Berichte*, 10, 2035.
- (39) Brunner, *Berichte*, 19, 2224-2225.
- (40) Perkin, *Soc.*, 49, 205-206.
- (41) Eijkmann, *R.*, 12, 162.
- (42) Krafft, *Brunner, Berichte*, 17, 2986.
- (43) Thoms, *Feudler, Ar.* 238, 691.
- (44) Krafft, *Seldis, Berichte*, 33, 3573.
- (45) Hazura, *Grüssner, M.*, 9, 950.
- (46) Walker, *Lumscen, Soc.*, 79, 1192.
- (47) Shukow, *Schestakow, Journal of the Russian Physical Chemical Society*, 40, 837; *Centralblatt*, 1908 II, 1415.
- (48) Sherrill, *J. Am. Chem. Soc.* 52, 1982-1992.
- (49) I. G. Farbenind. A. G., *Brit. Pat.*, 284,458, Jan. 19, 1927.
- (50) Rutorsky & Koroleu, *J. Prakt. Chem.* 119, 272-274.
- (51) Müller, *Riechstoffind*, 1927, 27-29, 39-40; *Chemie et industrie*, 18, 824-825.
- (52) Eibner & Munzing, *Chem. Umschau*, 32, 153-162, 166-176.
- (53) St. Luke's Hosp. *Surg. Report*, 4, 6 (1917).
- (54) Simon, *Compt. Rendus*, 180, 833-836.
- (55) Boedtker, *J. Pharm. Chim.*, 29, 313, 319.
- (56) Parry *Encyclopedia of Perfumery*.

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